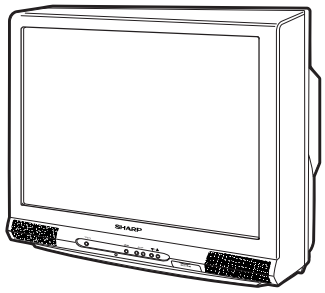
SHARP SERVICE MANUAL



COLOR TELEVISION

Chassis No. GB-3U

MODELS 32UF5

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

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ELECTRICAL SPECIFICATIONS

POWER INPUT ..... 120V AC, 60 Hz
POWER RATING 160W
PICTURE SIZE ..... 3074 cm^2 (476sq inch)
CONVERGENCE ..... Magnetic
SWEEP DEFLECTION ..... Magnetic
FOCUS ..... Hi-Bi-Potential Electrostatic
INTERMEDIATE FREQUENCIES
  Picture IF Carrier Frequency ..... 45.75 MHz
  Sound IF Carrier Frequency ..... 41.25 MHz
  Color Sub-Carrier Frequency ..... 42.17 MHz (Nominal)
AUDIO POWER
  OUTPUT RATING ..... 5.0W + 5.0W (at 10% distortion and Dual CH Operate)
SPEAKER
  SIZE ..... 12 x 6 cm oval (2 pcs.)
  VOICE COIL IMPEDANCE ..... 8 ohm at 400 Hz
ANTENNA INPUT IMPEDANCE
  VHF/UHF ..... 75 ohm Unbalanced
TUNING RANGES
  VHF-Channels ..... 2 thru 13
  UHF-Channels ..... 14 thru 69
  CATV Channels ..... 1 thru 125 (EIA, Channel Plan U.S.A.)

Specifications are subject to change without prior notice.

SHARP CORPORATION

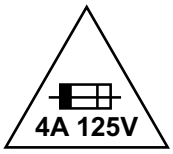
This document has been published to be used for after sales service only.
The contents are subject to change without notice.

IMPORTANT SERVICE SAFETY PRECAUTION

■ Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and the servicing guidelines which follow:

WARNING

1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.
3. Semiconductor heat sinks are potential shock hazards when the chassis is operating.
4. The chassis in this receiver has two ground systems which are separated by insulating material. The non-isolated (hot) ground system is for the B+ voltage regulator circuit. The isolated ground system is for the low B+ DC voltages and the secondary circuit of the high voltage transformer.
   To prevent electrical shock use an isolation transformer between the line cord and power receptacle, when servicing this chassis.



CAUTION: FOR CONTINUED PROTECTION AGAINST A RISK OF FIRE, REPLACE ONLY WITH SAME TYPE 4A-125V FUSE.

SERVICING OF HIGH VOLTAGE SYSTEM AND PICTURE TUBE

When servicing the high voltage system, remove the static charge by connecting a 10k ohm resistor in series with an insulated wire (such as a test probe) between the picture tube ground and the anode lead. (AC line cord should be disconnected from AC outlet.)

1. Picture tube in this receiver employs integral implosion protection.
2. Replace with tube of the same type number for continued safety.
3. Do not lift picture tube by the neck.
4. Handle the picture tube only when wearing shatterproof goggles and after discharging the high voltage anode completely.

X-RADIATION AND HIGH VOLTAGE LIMITS

1. Be sure all service personnel are aware of the procedures and instructions covering X-radiation. The only potential source of X-ray in current solid state TV receivers is the picture tube. However, the picture tube does not emit measurable X-Ray radiation, if the high voltage is as specified in the "High Voltage Check" instructions.
   It is only when high voltage is excessive that X-radiation is capable of penetrating the shell of the picture tube including the lead in the glass material. The important precaution is to keep the high voltage below the maximum level specified.
2. It is essential that servicemen have available at all times an accurate high voltage meter.
   The calibration of this meter should be checked periodically.
3. High voltage should always be kept at the rated value –no higher. Operation at higher voltages may cause a failure of the picture tube or high voltage circuitry and;also, under certain conditions, may produce radiation in exceeding of desirable levels.
4. When the high voltage regulator is operating properly there is no possibility of an X-radiation problem. Every time a color chassis is serviced, the brightness should be tested while monitoring the high voltage with a meter to be certain that the high voltage does not exceed the specified value and that it is regulating correctly.
5. Do not use a picture tube other than that specified or make unrecommended circuit modifications to the high voltage circuitry.
6. When trouble shooting and taking test measurements on a receiver with excessive high voltage, avoid being unnecessarily close to the receiver.
   Do not operate the receiver longer than is necessary to locate the cause of excessive voltage.

IMPORTANT SERVICE SAFETY PRECAUTION

(Continued)

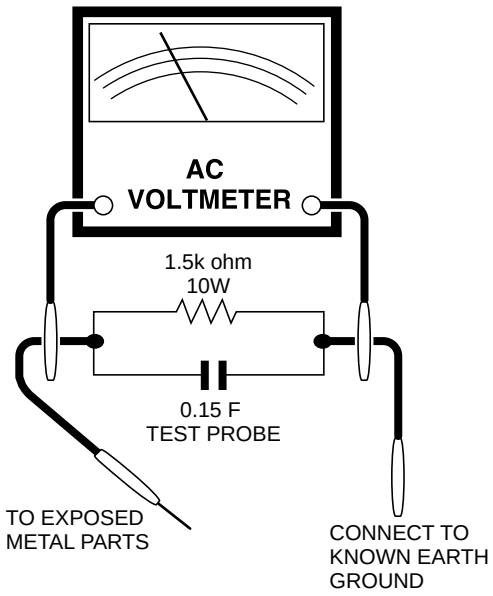
BEFORE RETURNING THE RECEIVER

(Fire & Shock Hazard)

Before returning the receiver to the user, perform the following safety checks.

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective devices such as non-metallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators, etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.

- Plug the AC cord directly into a 120 volt AC outlet, (Do not use an isolation transformer for this test).
- Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15µF capacitor in series with all exposed metal cabinet parts and a known earth ground, such as electrical conduit or electrical ground connected to earth ground.
- Use an AC voltmeter having with 5000 ohm per volt, or higher, sensitivity to measure the AC voltage drop across the resistor.
- Connect the resistor connection to all exposed metal parts having a return to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.
  AII checks must be repeated with the AC line cord plug connection reversed. (If necessary, a non-polarized adapter plug must be used only for the purpose of completing these check.)
  Any current measured must not exceed 0.5 milliamp. Any measurements not within the limits outlined above indicate of a potential shock hazard and corrective action must be taken before returning the instrument to the customer.



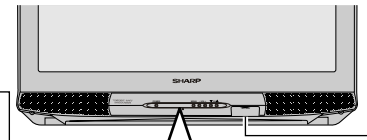
SAFETY NOTICE

Many electrical and mechanical parts in television receivers have special safety-related characteristics. These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.
Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by "⚠" and shaded areas in the Replacement Parts Lists and Schematic Diagrams.

For continued protection, replacement parts must be identical to those used in the original circuit. The use of substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire, X-radiation or other hazards.

LOCATION OF USER'S CONTROL(32UF5)

Front Panel



POWER
Press On.
Press again Off.

VIDEO/AUDIO IN 2 TERMINALS (INSIDE DOOR)

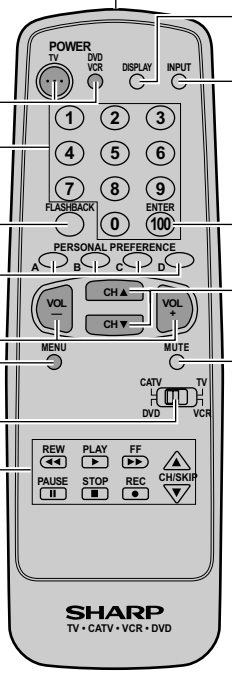
SENSOR AREA FOR REMOTE CONTROL

CHANNEL UP/DOWN
(8) Selects next higher channel.
(9) Selects next lower channel.
• Press both at the same time to access the MAIN MENU screen.

MENU
Press Accesses MAIN MENU.
Press again Exits MAIN MENU.

VOLUME UP/DOWN
(+) Increases sound.
(–) Decreases sound.

Basic Remote Control Functions



Infrared Transmitter Window

DISPLAY
Press Displays receiving channel for four seconds.
Press again Removes display.
• Temporarily displays receiving channel when in Closed Caption mode.

INPUT
Press Switch to external video INPUT 1 mode.
Press 2 times Switch to external video INPUT 2 mode.
Press 3 times Switch to external video INPUT 3 mode or COMPONENT mode.
Press 4 times Switch back to the original TV mode.

POWER
Press On.
Press again Off.

REMOTE KEYPAD
Accesses any channel from keypad.

FLASHBACK
Returns to previous channel.

PERSONAL PREFERENCE
With the Personal Preference buttons, you can program your favorite programs by using the 4 categories A, B, C and D. The channels can be accessed quickly by using these buttons.

VOLUME UP/DOWN
(+) Increases sound.
(–) Decreases sound.
• In menu mode, changes or selects the TV adjustments.

MENU
Press Accesses MAIN MENU.
Press again Exits MAIN MENU.

CATV/DVD-TV/VCR MODE SELECT SWITCH
In TV/VCR position, sends power and channel select commands (Channel up/down and Random Access buttons) to the TV and VCR control.
In CATV/DVD position, sends power and channel select commands to a cable TV converter and DVD control.

DVD/VCR CONTROL

ENTER
Used in some instances where a Cable Converter Box requires an "enter" command after selecting channels, when using the REMOTE KEYPAD button.

CHANNEL UP/DOWN
(8) Selects next higher channel.
(9) Selects next lower channel.
• Moves the "a" mark of the MENU screens.

MUTE
Press Mutes sound.
Press again Restores sound.
• CLOSED CAPTION appears when sound is muted.

Note:

- The above shaded buttons on the Remote Control glow in the dark. To use the glow-in-the-dark display on the remote control, place it under a fluorescent light or other lighting.
- The phosphorescent material contains no radioactive or toxic mater ial, so it is safe to use.
- The degree of illumination will var y depending on the strength of lighting used.
- The degree of illumination will decrease with time and depending on the temperature.
- The time needed to charge the phosphorescent display will vary depending on the surrounding lighting.
- Sunlight and fluorescent lighting are the most effective when charging the display.

INSTALLATION AND SERVICE INSTRUCTIONS

Note: (1) When performing any adjustments to resistor controls and transformers use non-metallic screwdrivers or TV alignment tools.
(2) Before performing adjustments, the TV set must be on at least 15 minutes.

CIRCUIT PROTECTION

The receiver is protected by a 4.0A fuse (F701), mounted on PWB-A, wired into one side of the AC line input.

X-RADIATION PROTECTOR CIRCUIT TEST

After service has been performed on the horizontal deflection system, high voltage system, B+ system, test the X-Radiation protection circuit to ascertain proper operation as follows:

1. Apply 120V AC using a variac transformer for accurate input voltage.
2. Allow for warm up and adjust all customer controls for normal picture and sound.
3. Receive a good local channel.
4. Connect a digital voltmeter to TP651 (Pin 3) and make sure that the voltmeter reads 13.7 ±0.6V DC.
5. Apply external 17.3V DC at TP651 by using an external DC supply, TV must be shut off.
6. To reset the protector, unplug the AC cord and plug the AC cord power on. Now make sure that normal picture appears on the screen.
7. If the operation of the horizontal oscillator does not stop in step 5, the circuit must be repaired before the set is returned to the customer.

HIGH VOLTAGE CHECK

High voltage is not adjustable but must be checked to verify that the receiver is operating within safe and efficient design limitations as specified checks should be as follows:

1. Connect an accurate high voltage meter between ground and anode of picture tube.
2. Operate receiver for at least 15 minutes at 120V AC line voltage, with a strong air signal or a properly tuned in test signal.
3. Enter the service mode and select the service adjustment "V11" and Bus data "01" (Y-mute on, CRT Cut Off).
4. The voltage should be below 35.0kV (at zero beam). If a correct reading cannot be obtained, check circuitry for malfunctioning components. After the voltage test, make Y-mute off to the normal mode.

For adjustments of this model, the bus data is converted to various analog signals by the D/A converter circuit.

Note: There are still a few analog adjustments in this series such as focus and master screen voltage. Follow the steps below whenever the service adjustment is required. See "Table-B" to determine, if service adjustments are required.

1. Service mode

Before putting unit into the service mode, check that customer adjustments are in the normal mode. Use the reset function in the video adjustment menu to ensure customer controls are in their proper (reset) position.

2. Service number selection

Once in the service mode, press the Ch-up or Ch-down button on the remote controller or at the set. The service adjustment number will vary in increments of one, from "V01" to "P08". Select the item you wish to adjust.

3. Data number selection

Press the Vol-up or Vol-down button to adjust the data number.

To enter the service mode and exit service mode.

To enter the service mode manually just press and hold the Vol-down and Ch-up buttons at the same time, plug the AC cord into a wall socket.
Now the TV set is switched on and enters the service mode.
To exit the service mode, turn the television off by pressing the power button.

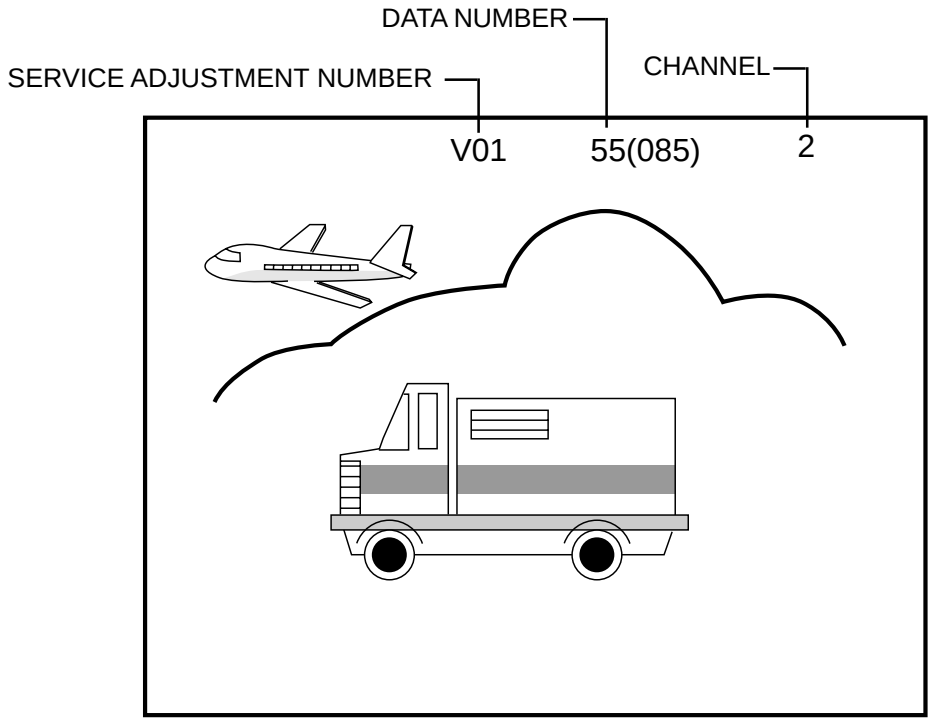


Figure A.

A. VCJ IC ADJUSTMENT

SERVICE NUMBER	ADJUSTMENT ITEM	DATA		NOTES	FIXED VALUE (HEX)
		RANGE	INITIAL VALUE		
V01	PICTURE	0-15 (00h-0Fh)	8 (08h)		
V02	TINT	0-127 (00h-7Fh)	66 (42h)		
V03	COLOR	0-127 (00h-7Fh)	56 (38h)		
V05	BRIGHT	0-127 (00h-7Fh)	64 (40h)		
V06	R CUT-OFF	64-255 (40h-FFh)	64 (40h)		
V07	G CUT-OFF	64-255 (40h-FFh)	64 (40h)		
V08	B CUT-OFF	64-255 (40h-FFh)	64 (40h)		
V09	G/R DRIVE	0-127 (00h-7Fh)	64 (40h)		
V10	B DRIVE	0-127 (00h-7Fh)	64 (40h)		
V11	Y-MUTE/V-STOP	0-2	0 (00h)	Y-Mute / Holizontal “—”	
V12	SHARP	0-63 (00h-3Fh)	50 (32h)		32
V13	DC RESTORATION	0-3 (00h-03h)	2 (02h)		02
V14	BLACK STRETCH	0-3 (00h-03h)	2 (02h)		02
V15	ABL START POINT	0-3 (00h-03h)	3 (03h)		03
V16	ABL GAIN	0-3 (00h-03h)	2 (02h)		02
V17	γ POINT	0-3 (00h-03h)	0 (00h)		00
V19	ENERGY SAVE	0-63 (00h-3Fh)	63 (3Fh)	Offset	3F
V24	LOW-G	0-255 (00h-FFh)	12 (0Ch)	Color Temp.	F4
V25	LOW-B	0-255 (00h-FFh)	241 (F1h)	Color Temp.	E6
V26	ML-G	0-255 (00h-FFh)	0 (00h)	Color Temp.	FD
V27	ML-B	0-255 (00h-FFh)	247 (F7h)	Color Temp.	F8
V28	HIGH-G	0-255 (00h-FFh)	2 (02h)	Color Temp.	01
V29	HIGH-B	0-255 (00h-FFh)	8 (08h)	Color Temp.	06
V30	WPL	0-1	1 (01h)		01
V31	RGB CONTRAST	0-63 (00h-3Fh)	59 (3Bh)		3B
V34	VSM GAIN	0-3 (00h-03h)	1 (01h)		01
V36	BPF/TOF-INPUT	0-1	0 (00h)	External Input	00
V37	CORING	0-1	0 (00h)		00
V38	VSM PHASE	0-1	0 (00h)		00
V39	COLOR γ	0-1	0 (00h)		00
V40	SHARP-INPUT	0-63 (00h-3Fh)	44 (2Ch)	External Input	2C
V41	TINT-INPUT	0-127 (00h-7Fh)	62 (3Eh)	External Input	3E
V42	PICTURE-COMPONENT	0-15 (00h-0Fh)	6 (06h)	Component Input	
V43	TINT-COMPONENT	0-127 (00h-7Fh)	62 (3Eh)	Component Input	3E
V44	COLOR-COMPONENT	0-127 (00h-7Fh)	72 (48h)	Component Input	48
V45	BRIGHT-COMPONENT	0-127 (00h-7Fh)	84 (54h)	Component Input	
V46	R CUT OFF-COMPONENT	64-255 (00h-FFh)	64 (40h)	Component Input	
V47	G CUT OFF-COMPONENT	64-255 (00h-FFh)	64 (40h)	Component Input	
V48	B CUT OFF-COMPONENT	64-255 (00h-FFh)	64 (40h)	Component Input	
V49	G/R DRIVE-COMPONENT	0-127 (00h-7Fh)	64 (40h)	Component Input	
V50	B DRIVE-COMPONENT	0-127 (00h-7Fh)	64 (40h)	Component Input	
V51	SHARP-COMPONENT	0-63 (00h-3Fh)	44 (2Ch)	Component Input	2C
V52	TINT-S	0-127 (00h-7Fh)	62 (3Eh)	Component Input	3E
V53	C-TRAP	0-1 (00h-01h)	0 (00h)		00
V59	AUTO FRESH	0-1 (00h-01h)	0 (00h)		00
V60	SHARP P F	0-1 (00h-01h)	1 (01h)		01
V61	CD MATRIX	0-3 (00h-03h)	2 (02h)		02
V62	B-Y ATT	0-1 (00h-01h)	0 (00h)		00
V63	R-Y ATT	0-1 (00h-01h)	0 (00h)		00
V64	CD MATRIX COMPONENT	0-3 (00h-03h)	0 (00h)	Component Input	00
V65	B-Y ATT-COMPONENT	0-1 (00h-01h)	0 (00h)	Component Input	00
V66	R-Y ATT-COMPONENT	0-1 (00h-01h)	0 (00h)	Component Input	00
V67	BUZZ	0-1 (00h-01h)	1 (01h)		01
V68	RGB ABCL	0-1 (00h-01h)	1 (01h)		01
V69	PICTURE-VCOMP	0-100 (00h-64h)	47 (2Fh)	16:9 Format (Offset)	2F
V70	COLOR-VCOMP	0-100 (00h-64h)	50 (32h)	16:9 Format (Offset)	32
V71	BRIGHT-VCOMP	0-100 (00h-64h)	51 (33h)	16:9 Format (Offset)	33
R01	RF-AGC	0-63 (00h-3Fh)	36 (24h)		
R03	RF-AGC REF	0-255 (00h-FFh)	170 (AAh)	Standard value for the self-adjustment	AA
D01	V POSITION	0-7 (00h-07h)	0 (00h)		00
D02	H POSITION	0-31 (00h-1Fh)	15 (0Fh)		
D03	V SIZE	0-127 (00h-7Fh)	89 (59h)		
D04	H SIZE	0-63 (00h-3Fh)	36 (24h)		
D05	V-LINEARITY	0-15 (00h-0Fh)	8 (08h)		
D06	V-S CORRECTION	0-15 (00h-0Fh)	12 (0Dh)		0D
D07	EW PARABOLA	0-63 (00h-3Fh)	43 (2Bh)		
D08	EW TRAPEZIUM	0-63 (00h-3Fh)	36 (24h)		
D10	AFC GAIN	0-3 (00h-03h)	2 (02h)		02
D11	V EHT	0-7 (00h-07h)	6 (06h)		06
D12	H EHT	0-7 (00h-07h)	6 (06h)		06
D13	EW CORNER	0-31 (00h-1Fh)	8(08h)		08

SERVICE NUMBER	ADJUSTMENT ITEM	DATA		NOTES	FIXED VALUE (HEX)
		RANGE	INITIAL VALUE		
D14	EW CORNER BOTTOM	19-81 (13h-51h)	50 (32h)	Offset toward D13.	32
D15	NOISE DET LEVEL	0-3 (00h-03h)	0 (00h)		00
D18	V CENTERING	0-63 (00-3Fh)	36 (24h)		
D19	V-AGC	0-1 (00h-01h)	0 (00h)		00
D20	V POSITION-VCOMP	0-7 (00h-07h)	0 (00h)	16:9 Format	00
D21	H POSITION-VCOMP	0-31 (00h-1Fh)	15(0Fh)	16:9 Format	
D22	V SIZE-VCOMP	0-127 (00h-7Fh)	52(34h)	16:9 Format	
D23	H SIZE-VCOMP	0-63 (00h-3Fh)	36(24h)	16:9 Format	
D24	V-LINEARITY-VCOMP	0-15 (00h-0Fh)	8(08h)	16:9 Format	
D25	V-C CORRECTION-VCOMP	0-15 (00h-0Fh)	10(0Ah)	16:9 Format	0B
D26	EW PARABOLA-VCOMP	0-63 (00h-3Fh)	22(16h)	16:9 Format	
D27	EW TRAPEZIUM-VCOMP	0-63 (00h-3Fh)	35(23h)	16:9 Format	
D28	V EHT-VCOMP	0-7 (00h-07h)	6(06h)	16:9 Format	06
D29	H EHT-VCOMP	0-7 (00h-07h)	6(06h)	16:9 Format	06
D30	EW CORNER-VCOMP	0-31 (00h-1Fh)	12(0Ch)	16:9 Format	0B
D31	EW CORNER BOTTOM-VCOMP	19-81 (13h-51h)	50(32h)	Offset toward D30	32
D32	V BLK UPPER-VCOMP	0-3 (00h-03h)	2(02h)	16:9 Format	02
D33	V BLK LOWER-VCOMP	0-3 (00h-03h)	2(02h)	16:9 Format	02
D34	V CENTERING-VCOMP	0-63 (00h-3Fh)	36(24h)	16:9 Format	

B. SPECIAL SETTING

SERVICE NUMBER	ADJUSTMENT ITEM	DATA		NOTES	FIXED VALUE (HEX)
		RANGE	INITIAL VALUE		
EX1	FAO VOLUME	0-50 (00h-32h)	36 (24h)		24
EX2	CC-POSITION	0-127 (00h-7Fh)	27 (1Bh)		1C
EX3	INT	0-255 (00h-FFh)	122 (7Ah)	Interrupt period adjustment.	7A
EX4	A-ATT	0-127 (00h-7Fh)	90 (5Ah)		5A
EX5	TUNER data	0-3 (00h-03h)	0 (00h)		00
EX6	Think chip-Slice LEVEL	0-255 (00h-FFh)	54 (36h)		12
EX7	RLY DELAY TIME	0-255 (00h-FFh)	0 (00h)	For the power control	00
EX8	ADG ON TIME	0-255 (00h-FFh)	10 (0Ah)	For the power control	0A

C. OPTION SETTING

SERVICE NUMBER	ADJUSTMENT ITEM	DATA		NOTES	FIXED VALUE (HEX)
		RANGE	INITIAL VALUE		
OP1	OPTION1	0-255 (00h-FFh)	245 (F5h)		F5
OP2	OPTION2	0-255 (00h-FFh)	188 (BCh)		BC
OP3	OPTION3	0-255 (00h-FFh)	15 (0Fh)		0F

D. SOUND ADJUSTMENT

SERVICE NUMBER	ADJUSTMENT ITEM	DATA		NOTES	FIXED VALUE (HEX)
		RANGE	INITIAL VALUE		
M01	INPUT LEVEL	0-15 (00h-0Fh)	7 (07h)		
M02	MTS VCO	0-63 (00h-3Fh)	38 (26h)		
M03	FILTER	0-63 (00h-3Fh)	36 (24h)		
M04	WIDEBAND	0-63 (00h-3Fh)	28 (1Ch)		
M05	SPECTRAL	0-63 (00h-3Fh)	23 (17h)		
M09	SRS LEVEL	0-255 (00h-FFh)	224 (E0h)		E0
M10	BBE LEVEL	0-255 (00h-FFh)	217 (D9h)		D9
M11	SRS&BBE LEVEL	0-255 (00h-FFh)	208 (D0h)		D0
M12	SRS&BBE OFF LEVEL	0-255 (00h-FFh)	228 (E4h)		E4
M13	SRS Effect	2-3 (02h-03h)	2 (02h)		02
M14	BBE-L Effect	0-15 (00h-0Fh)	15 (0Fh)		0F
M15	BBE-H Effect	0-15 (00h-0Fh)	15 (0Fh)		0F
M16	AGC Level	0-7 (00h-07h)	1 (01h)		01
M17	BASS Offset	0-31 (00h-1Fh)	15 (0Fh)		0F
M18	TREBLE Offset	0-31 (00h-1Fh)	15 (0Fh)		0F
M19	BASS Offset-BBE	0-31 (00h-1Fh)	17 (11h)		11
M20	TREBLE Offset-BBE	0-31 (00h-1Fh)	16 (10h)		10

Holding down both the VOL-up and CH-up buttons on the TV set at service mode for more than 2 seconds will

PART REPLACED	ADJUSTMENT		NOTES
	NECESSARY	UNNECESSARY	
IC2001		X	Data is stored in IC2101.
IC201	X		The adjustment is needed to compensate for characteristics of parts
IC2101	X		Holding down both the VOL-up and CH-up buttons on the TV set in the service mode for more than 2 seconds will automatically write the
CRT	X		Adjust items related to picture tube only.
IC3001	X		Adjust items related to MTS only (M01~M20).

SERVICE ADJUSTMENT

RF AGC Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "R01".
3. Set the data value to point where no noise or beat appears.
4. Select another channel to confirm that no noise or beat appears.
   Note 1 : You will have to come out of the service mode to select another channel.
   Note 2 : Setting the data to "00" will produce a black raster.

Screen Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "V03" and set the data value to "00" to set the color level to minimum. (Record original data code under adjustment "V03" before changing) You may skip this step, if you selected a B/W picture or monoscope pattern.
3. Select the service adjustment "V11" and adjust the data value to "01", this turn off the luminance signal (Y-mute).
4. Adjust the master screen control until the raster darkens to the point where raster is barely seen.
5. Adjust the service adjustments "V06" red, "V07" green and "V08" blue to obtain a good grey scale with normal whites at low brightness level.
6. Select the service adjustment "V11" and reset data to "00". Select the service adjustment "V03" and reset data to obtain normal color level.
7. For component input, the data value of "V46" red, "V47" green and "V48" blue is adjusted to follow the data value of "V06", "V07" and "V08" respectively.
8. Reset the master screen control to obtain normal brightness range.

White Balance Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "V03" and set to "00" (minimum color)(Record original data code under adjustment "V03" before changing). "V03" does not have to be adjusted, if you selected a B/W picture or monoscope pattern.
3. Alternately adjust the service adjustment data of "V09" and "V10" until a good grey scale with normal whites is obtained. (RF Input)
4. For component input, the data value of "V49" and "V50" is adjusted to follow the data value of "V09" and "V10" respectively.
5. Select the service adjustment "V03" and reset data to obtain normal color level.

Sub-picture and Sub-Bright Adjustments

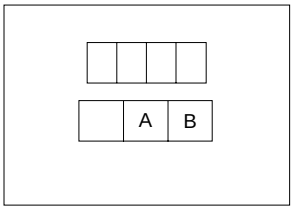
1. Receive the window pattern signal.

• RF INPUT (TU51)

2. Get into service adjustment data "V01" and "V05" and set the luminance as shown in figure "A" and "B" as below respectively.

• COMPONENT INPUT

3. Get in service adjustment data "V42" and "V45" and set the luminance as shown in figure "A" and "B" as below respectively.



LUMINESCENCE CONFIRMATION

A: 95±10cd/m^2

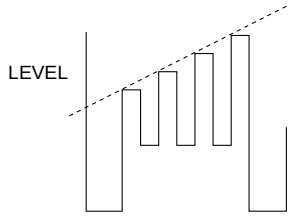
B: 1.5±0.5cd/m^2

Sub-Tint Adjustment

1. Receive the half color bar signal.

• RF INPUT (TU51)

2. Get into Y-Mute by R/C, or by setting the "V11" bus data to "01".
3. Vary the "V02" bus data until the waveform becomes as stated below.



B-AMP Base waveform in step (TP47B)

Sub-Color Adjustment

1. Receive a good local channel.
2. Make sure the customer color control is set to center position .

• RF INPUT (TU51)

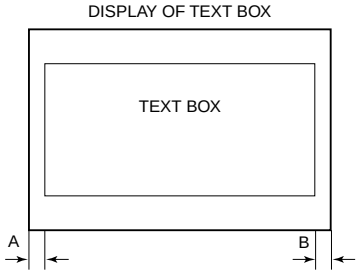
3. Enter the service mode and select service adjustment "V03".
4. Adjust "V03" data value to obtain a normal color level.

Focus Adjustment

1. Receive a good local channel.
2. Adjust the FOCUS VR of the flyback transformer to make the image as fine as possible.

C. C Display Position Adjustment

1. Receive the lion head pattern signal.
2. Select "EX2" to display the text box.
3. Adjust the "EX2" bus data to let the text box displayed in the center.



| A-B | / 2

SPEC INSPECTION:| A-B | / 2 ≦ 5mm

Vertical-Size and Linearity Adjustments

1. Receive a good local channel.

(SCREEN FORMAT 4:3)

2. Enter the service mode and select the service adjustment "D03" for V-size.
3. Adjust the "D03" bus data to get the proper V-size.
4. For V-linearity adjustment, select data bus "D05" and adjust to get the proper vertical linearity.

(SCREEN FORMAT 16:9)

5. Input data of "D22" to mines 36 step from "D03" data. (V-SIZE)
6. Input data of "D24" same as "D05" data. (V-LIN)

Note: Aging for 10 min before adjustment. After the adjustment of V-center and V-size, re-adjustment for this V-line.

Vertical Phase Adjustment

(SCREEN FORMAT 4:3)

1. Enter the service mode and input data of “00h” on "D01".
2. Adjust "D18" data value so that picture is centered.

(SCREEN FORMAT 16:9)

3. Input data of "00h" on "D20".
4. Input data of "D34" same as "D18" data.

Horizontal Position Adjustment

1. Receive a good local channel.

(SCREEN FORMAT 4:3)

2. Enter the service mode and select the service adjustment "D02".
3. Adjust "D02" data value so that picture is centered.

(SCREEN FORMAT 16:9)

4. Input data of "D21" same as "D02" data.

Horizontal-Size Adjustment

1. Receive a good local channel.

(SCREEN FORMAT 4:3)

2. Enter the service mode and select the service adjustment "D04" for H-size.
3. Adjust the "D04" bus data to get the proper H-size.

(SCREEN FORMAT 16:9)

4. Input data of "D23" same as "D04" data.

EW-Parabola

1. Receive a good local channel.

(SCREEN FORMAT 4:3)

2. Enter the service mode and select the service adjustment "D07" for EW parabola.
3. Adjust the "D07" bus data to get the proper vertical straight line for both left and right side.

(SCREEN FORMAT 16:9)

4. Input data of "D26" to mines 19 step from "D07" data.

EW-Trapezium

1. Receive a good local channel.

(SCREEN FORMAT 4:3)

2. Enter the service mode and select the service adjustment "D08" for EW-Trapezium.
3. Adjust the "D08" bus data to get the best position display.

(SCREEN FORMAT 16:9)

4. Input data of "D27" same as "D08" data.

■ MTS ADJUSTMENT

MTS Level Adjustment

1. Set the sound volume above 1.
   Monoral signal: 400Hz, 100% modulation
2. Confirm "EX4" data is "5Ah".
3. Vary the "M01" bus data until the voltage to pin (39) of IC3001 to become the value as stated below.
   SETTING VOLTAGE
   ADJ spec : 490±10mVrms
   CHK spec: 490±20mVrms

MTS VCO Adjustment

1. Keep the unit in no-signal state.
2. Connect the frequency counter to pin (39) of IC3001.
3. Connect a capacitor (100µF, 50V) in between positive(+) side of C3005 and ground.
4. Enter the service mode and select the service adjustment "M02"
5. Adjust the data so that the frequency counter reads 62.94 ±0.75kHz.

Filter Adjustment

1. Feed the following stereo pilot signal to pin (14) of IC3001 at C3005 open.
   Stereo pilot signal: 9.4kHz, 600mVrms.
2. Enter the service mode and select the service adjustment "M03".
3. Adjust the data until "OK" appears in position on the screen. Make sure the "OK" is displayed almost at the center of the data range.

Separation Adjustment

1. Input "SIGNAL 1" and vary the "M04" bus data to get the minimun AC voltage to pin (39) of IC3001.
2. Input "SIGNAL 2" and vary the "M05" bus data to get the minimun AC voltage to pin (39) of IC3001.
   SIGNAL 1: 300Hz, 30% modulation, Lch only, NR-ON
   SIGNAL 2: 3kHz, 30% modulation, Lch only, NR-ON

Note: SIGNAL 1 Adj. for widebando
SIGNAL 2 Adj. for spectral

Check the output of the speaker at the maximum volume as stated below.
Confirmation spec:
ADJ spec: above 25 dB
CHK spec: above 20 dB

DESCRIPTION OF SCHEMATIC DIAGRAM

NOTES:

1. *The unit of resistance "ohm" is omitted. (K=kΩ=1000Ω, M=MΩ)*
2. *All resistors are 1/16 watt, unless otherwise noted.*
3. *All capacitors are μ F, unless otherwise noted. (P=pF=μμF)*
4. *(G) indicates ±2% tolerance may be used.*
5. ⏚ *indicates line isolated ground.*

VOLTAGE MEASUREMENT CONDITIONS:

1. *All DC voltages are measured with DVM connected between points indicated and chassis ground, line voltage set at 120V AC and all controls set for normal picture unless otherwise indicated.*
2. *All voltages measured with 1000μ V B & W or Color signal.*

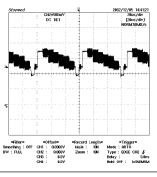
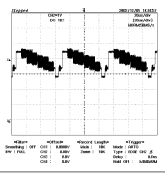
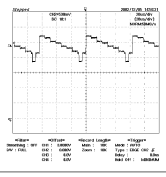
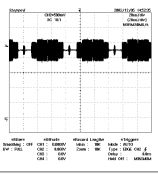
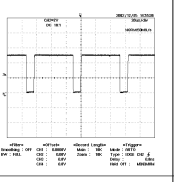
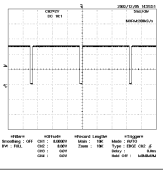
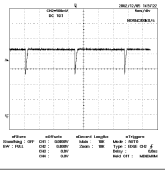
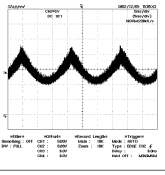
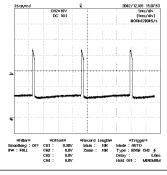
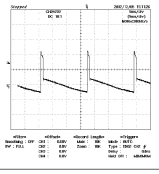
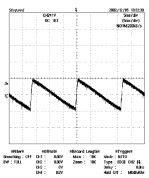
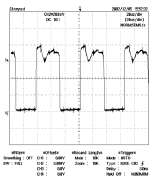
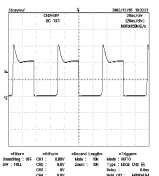
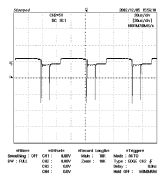
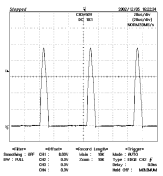
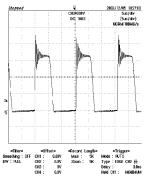
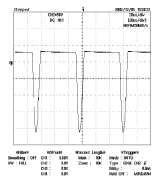
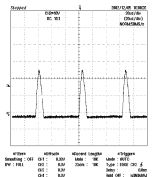
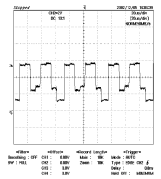
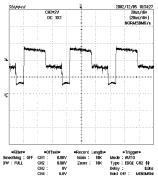
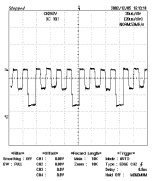
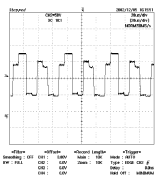
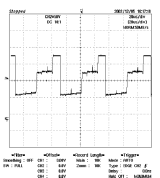
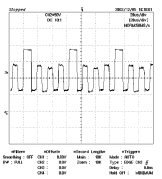
WAVEFORM MEASUREMENT CONDITIONS:

1. *Photographs taken on a standard gated color bar signal, the tint setting adjusted for proper color. The wave shapes at the red, green and blue cathodes of the picture tube depend on the tint, color level and picture control.*
2. ⟳ *indicates waveform check points (See chart, waveforms are measured from point indicated to chassis ground.)*

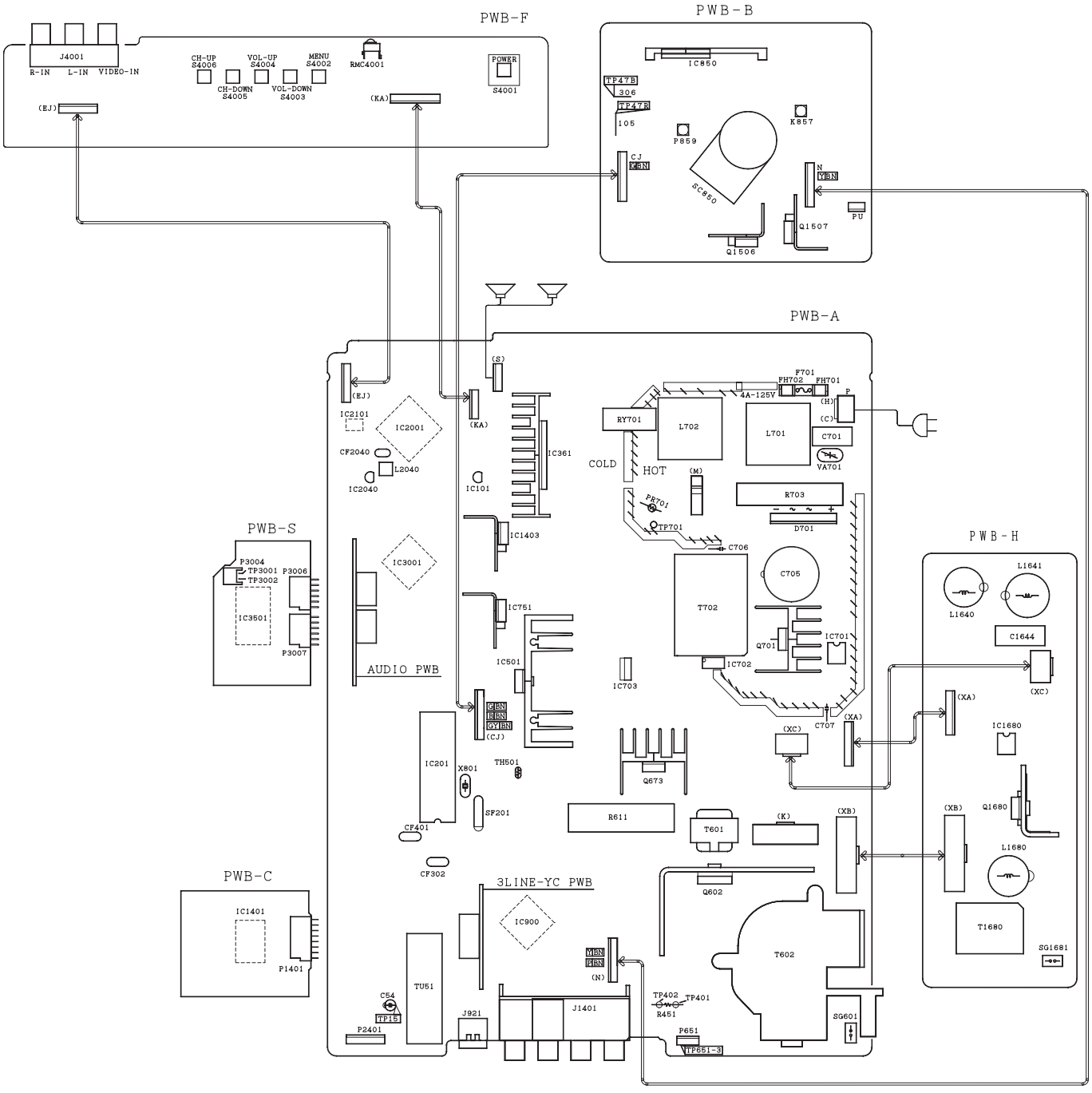
⚠ *AND SHADED (▭) COMPONENTS = SAFETY RELATED PARTS.*
▲ *MARK= X-RAY RELATED PARTS.*

This circuit diagram is a standard one, printed circuits may be subject to change for product improvement without prior notice.

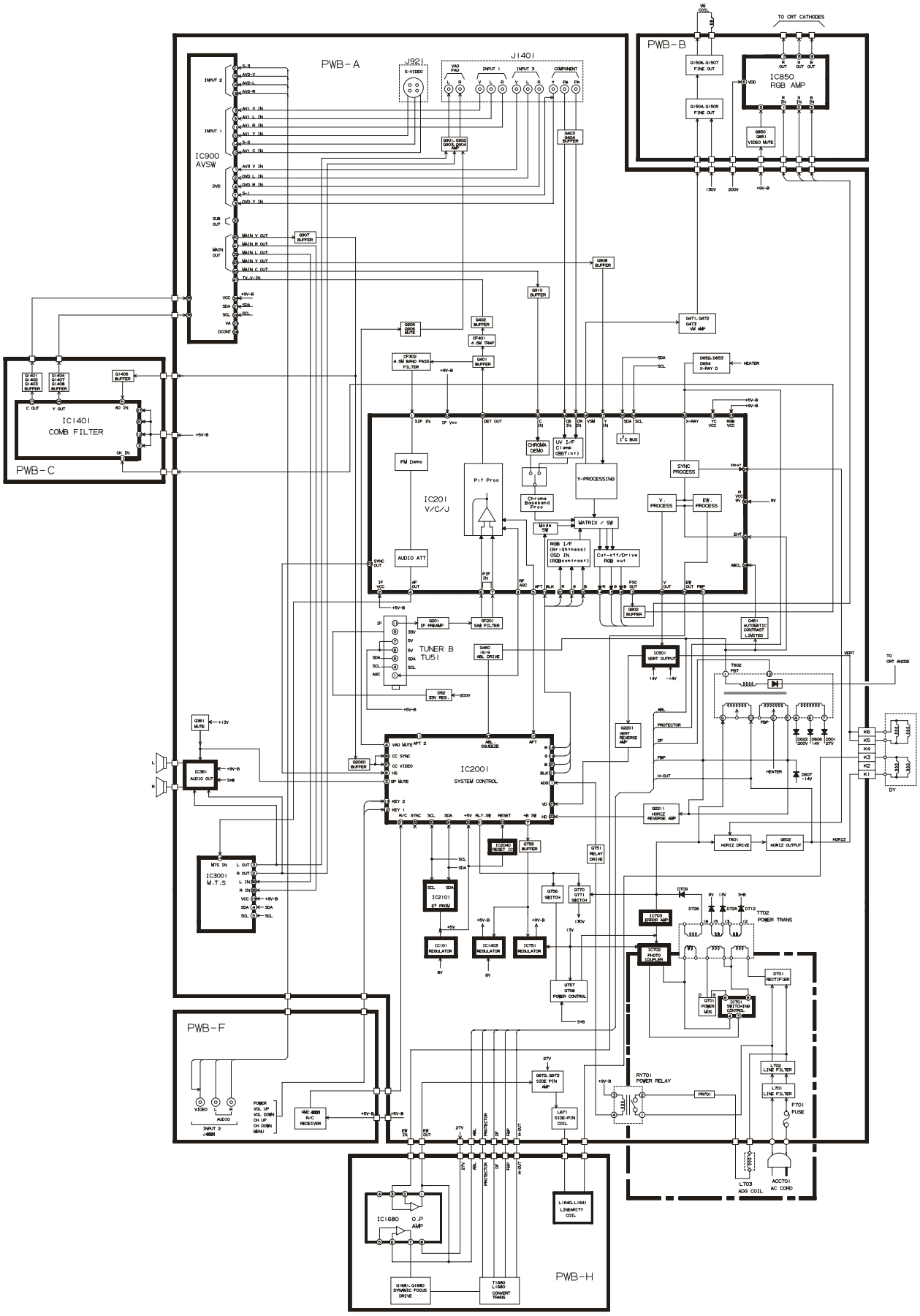
WAVEFORMS

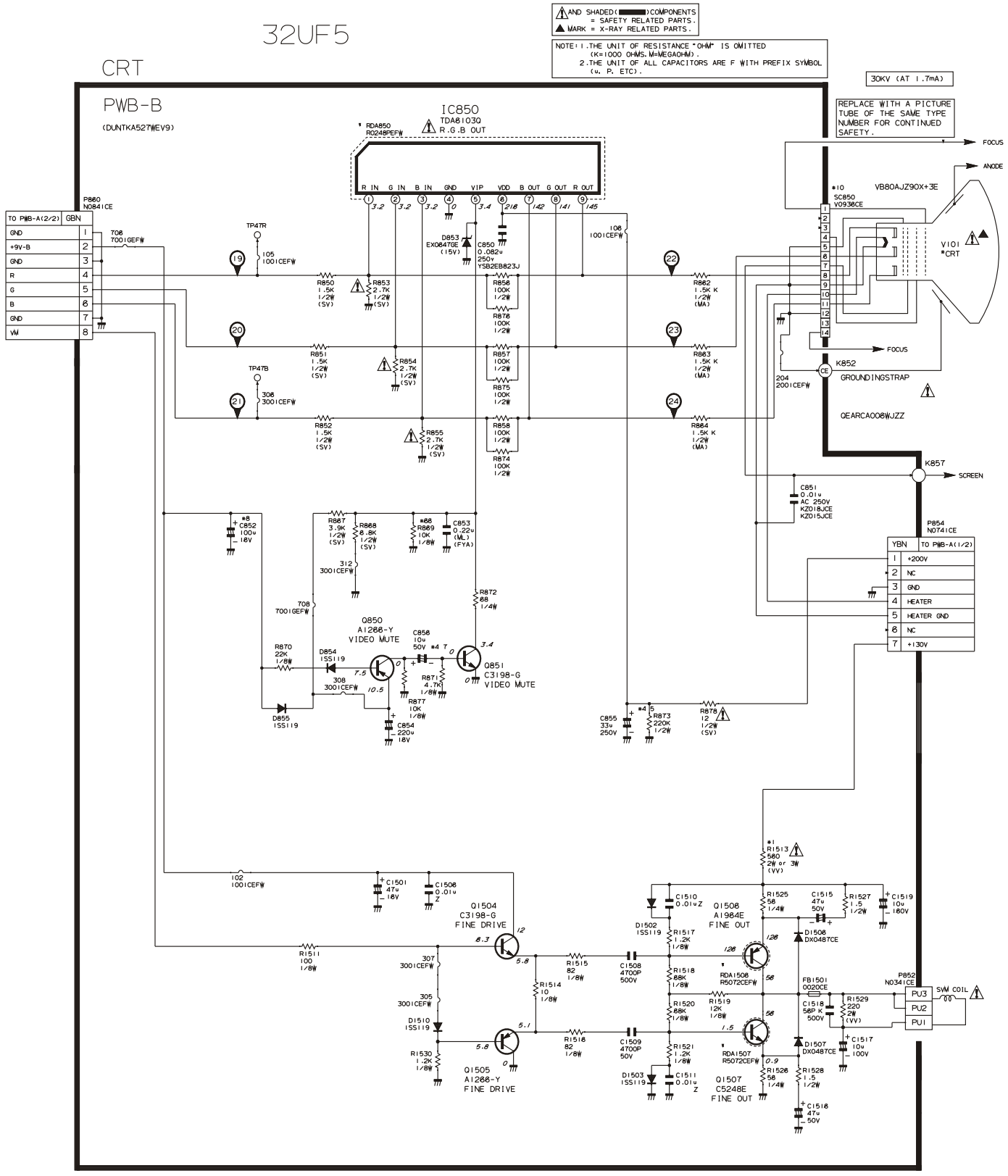
				
① 1.0 Vpp	② 2.1 Vpp	③ 1.0 Vpp	④ 0.75 Vpp	⑤ 5.0 Vpp
				
⑥ 5.0 Vpp	⑦ 0.85 Vpp	⑧ 12.5 Vpp	⑨ 32 Vpp	⑩ 56 Vpp
				
⑪ 2.0 Vpp	⑫ 0.8 Vpp	⑬ 230 Vpp	⑭ 14 Vpp	⑮ 1150 Vpp
				
⑯ 450 Vpp	⑰ 250 Vpp	⑱ 29.5 Vpp	⑲ 3.0 Vpp	⑳ 3.0 Vpp
				
㉑ 3.0 Vpp	㉒ 130 Vpp	㉓ 125 Vpp	㉔ 130 Vpp	

CHASSIS LAYOUT(32UF5)

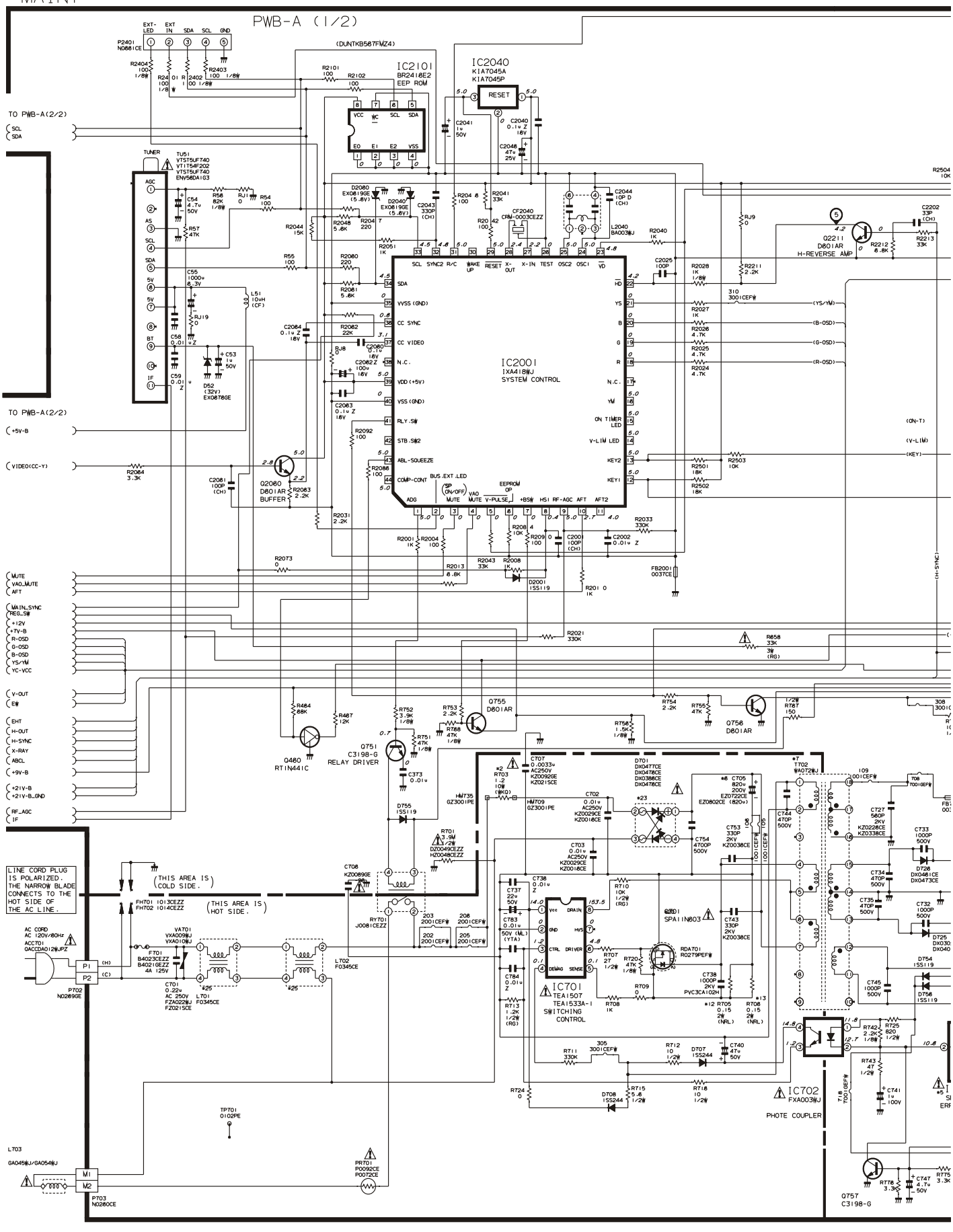


BLOCK DIAGRAM(32UF5)




32UF5
CRT
PWB-B
(DUNTKA527WEV9)
AND SHADED( )COMPONENTS = SAFETY RELATED PARTS.
MARK = X-RAY RELATED PARTS.
NOTE: 1.THE UNIT OF RESISTANCE "OHM" IS OMITTED (K=1000 OHMS, M=MEGA(OHM)).
2.THE UNIT OF ALL CAPACITORS ARE F WITH PREFIX SYMBOL (u, P, ETC).
30KV (AT 1.7mA)
REPLACE WITH A PICTURE TUBE OF THE SAME TYPE NUMBER FOR CONTINUED SAFETY.
IC850
TDA81030
R.G.B OUT
R IN G IN B IN GND VIP VDD B OUT G OUT R OUT
VB80AJZ90X+3E
V101
*CRT
FOCUS
ANODE
SCREEN
K852
GROUNDINGSTRAP
QEARCA008WJZZ
K857
P880
P854
P852
TO PWB-A(2/2)
YBN
SW COIL
Q850
A1268-Y
VIDEO MUTE
Q851
C3198-G
VIDEO MUTE
Q1504
C3198-G
FINE DRIVE
Q1505
A1268-Y
FINE DRIVE
Q1508
A1984E
FINE OUT
Q1507
C5248E
FINE OUT

MAIN 32UF5


PWB-A (1/2)
IC2001
IX4418WJ
SYSTEM CONTROL
IC2101
BR2418E2
EEP ROM
IC2040
KIA7045A
KIA7045P
IC701
TEA1507
TEA1533A-1
SWITCHING CONTROL
IC702
FXA003WJ
PHOTE COUPLER
Q2211
D801AR
H-REVERSE AMP
Q755
D801AR
Q756
D801AR
Q751
C3198-G
RELAY DRIVER
Q757
C3198-G
Q2080
D801AR
BUFFER
Q0480
RTIN441C
TUNER
TU51
VTSTSUFT40
VTI754F202
VTST5UFT40
ENV56DA1G3
TO PWB-A(2/2)
LINE CORD PLUG IS POLARIZED. THE NARROW BLADE CONNECTS TO THE HOT SIDE OF THE AC LINE.
(THIS AREA IS COLD SIDE.)
(THIS AREA IS HOT SIDE.)
AC CORD
AC 120V/60Hz
ACCT01
QACCDA012WJPZ
P702
N0289GE
VA701
VXA009WJ
VXA010WJ
F701
B4023CEZZ
B4021GEZZ
4A 125V
C701
0.22u
AC 250V
FZA022WJ
FZ0215CE
L701
F0345CE
L702
F0345CE
FH701 1013CEZZ
FH702 1014CEZZ
RY701
J008ICEZZ
TP701
0102PE
PR701
P0092CE
P007ZCE
L703
GA045WJ/GA054WJ
P703
N0280CE
D755
1SS119
D701
DX0477CE
DX0478CE
DX0388CE
DX0478CE
D708
1SS244
D707
1SS244
D756
1SS119
D754
1SS119
D725
DX0301
DX0401
D728
DX0481CE
DX0473CE
T701
WA072WJ
T702
WA072WJ
C707
0.0033u
AC250V
KZ0092GE
KZ0215CE
C702
0.01u
AC250V
KZ0029CE
KZ0018CE
C703
0.01u
AC250V
KZ0029CE
KZ0018CE
C705
820u
200V
EZ0722CE (820u)
EZ0802CE (820u)
C754
4700P
500V
C753
330P
2KV
KZ0038CE
C743
330P
2KV
KZ0038CE
C738
0.01u
Z
C737
22u
50V
C783
0.01u
50V (ML) (YTA)
C784
0.01u
Z
C744
470P
500V
C727
560P
2KV
KZ0228CE
KZ0338CE
C733
1000P
500V
C734
470P
500V
C735
470P
500V
C732
1000P
500V
C745
1000P
500V
C756
1000P
2KV
PVC3CA102H
C740
47u
50V
C741
1u
100V
C747
4.7u
50V
C746
1000P
2KV
PVC3CA102H
C708
KZ0089GE
C373
0.01u
C2002
0.01u Z
C2025
100P
C2044
10P D (CH)
C2040
0.1u Z
C2041
1u
50V
C2046
47u
25V
C2202
33P (CH)
C2213
33K
C2080
0.1u Z
C2081
100P (CH)
C2082
0.1u
C2083
100u
C2084
0.1u Z
C2063
0.1u Z
C2064
0.1u Z
C54
4.7u
50V
C55
1000u
C58
0.01u Z
C59
0.01u Z
C53
1u
50V
D52
(32V)
EX0878GE
D2080
EX0819GE
(5.8V)
D2040
EX0819GE
(5.8V)
D2001
1SS119
R2101
100
R2102
100
R2404
100
1/8W
R2401
100
1/8W
R2402
100
1/8W
R2403
100
1/8W
R2041
33K
R2043
33K
R2092
100
R2088
100
R2087
2.2K
R2031
2.2K
R2001
1K
R2004
100
R2008
1K
R2013
8.8K
R2033
330K
R2021
330K
R2073
0
R2064
3.3K
R2048
5.6K
R2047
220
R2051
1K
R2061
5.6K
R2080
220
R2082
22K
R2044
15K
R2040
1K
R2027
1K
R2028
4.7K
R2025
4.7K
R2024
4.7K
R2028
1K
1/8W
R2211
2.2K
R2212
8.8K
R2501
18K
R2502
18K
R2503
10K
R858
33K
3W
(RG)
R754
2.2K
R755
47K
R756
1.5K
1/8W
R757
1/2W
150
R752
3.9K
1/8W
R753
2.2K
R788
47K
1/8W
R751
47K
1/8W
R464
88K
R467
12K
R703
1.2
10W
(WKO)
R701
3.9M
1/2W
DZ0049CEZZ
HZ0048CEZZ
R710
10K
1/2W
(RG)
R720
47K
1/8W
R707
27
1/2W
R709
0
R708
1K
R712
10
1/2W
R711
330K
R724
0
R715
5.6
1/2W
R718
10
1/2W
R713
1.2K
1/2W
(RG)
R705
0.15
2W
(NRL)
R706
0.15
2W
(NRL)
R742
2.2K
1/8W
R725
820
1/2W
R743
47
1/2W
R776
3.3K
R775
3.3K
R2504
10K
R2509
0
R2510
0
R2511
0
R2512
0
R2513
0
R2514
0
R2515
0
R2516
0
R2517
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R2518
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R2519
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R2520
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R2521
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R2522
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R2523
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R2524
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R2525
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R2526
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R2527
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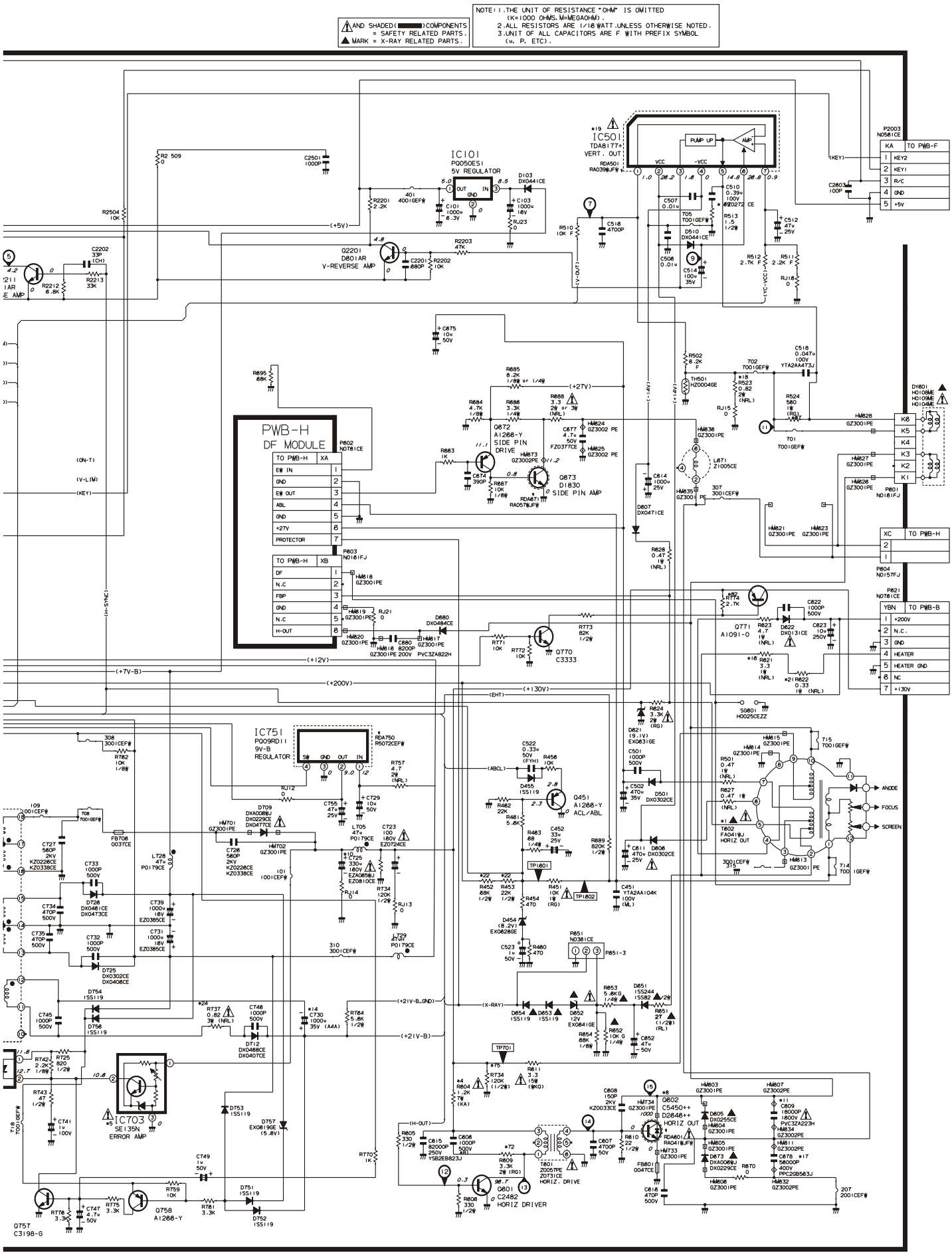
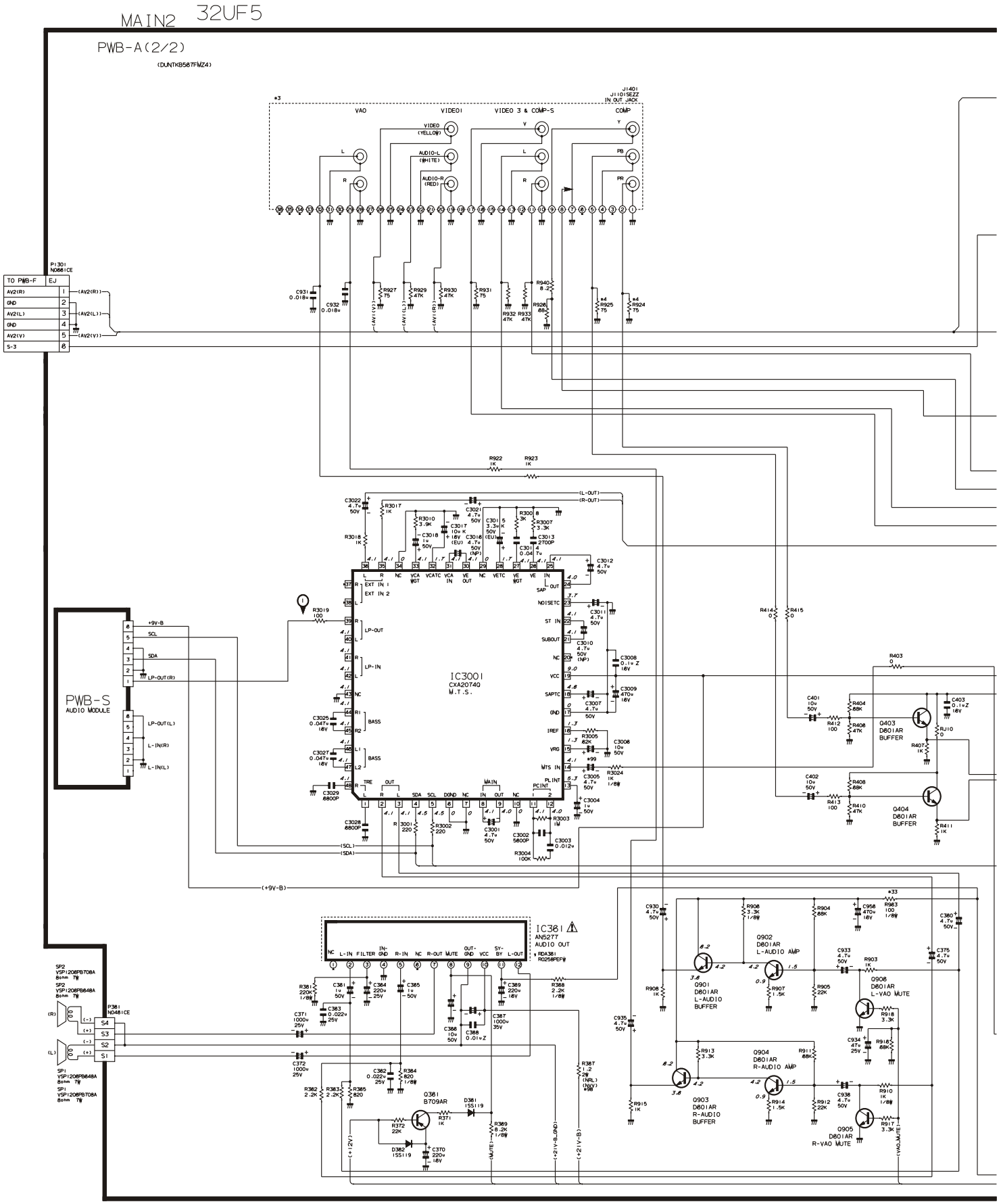
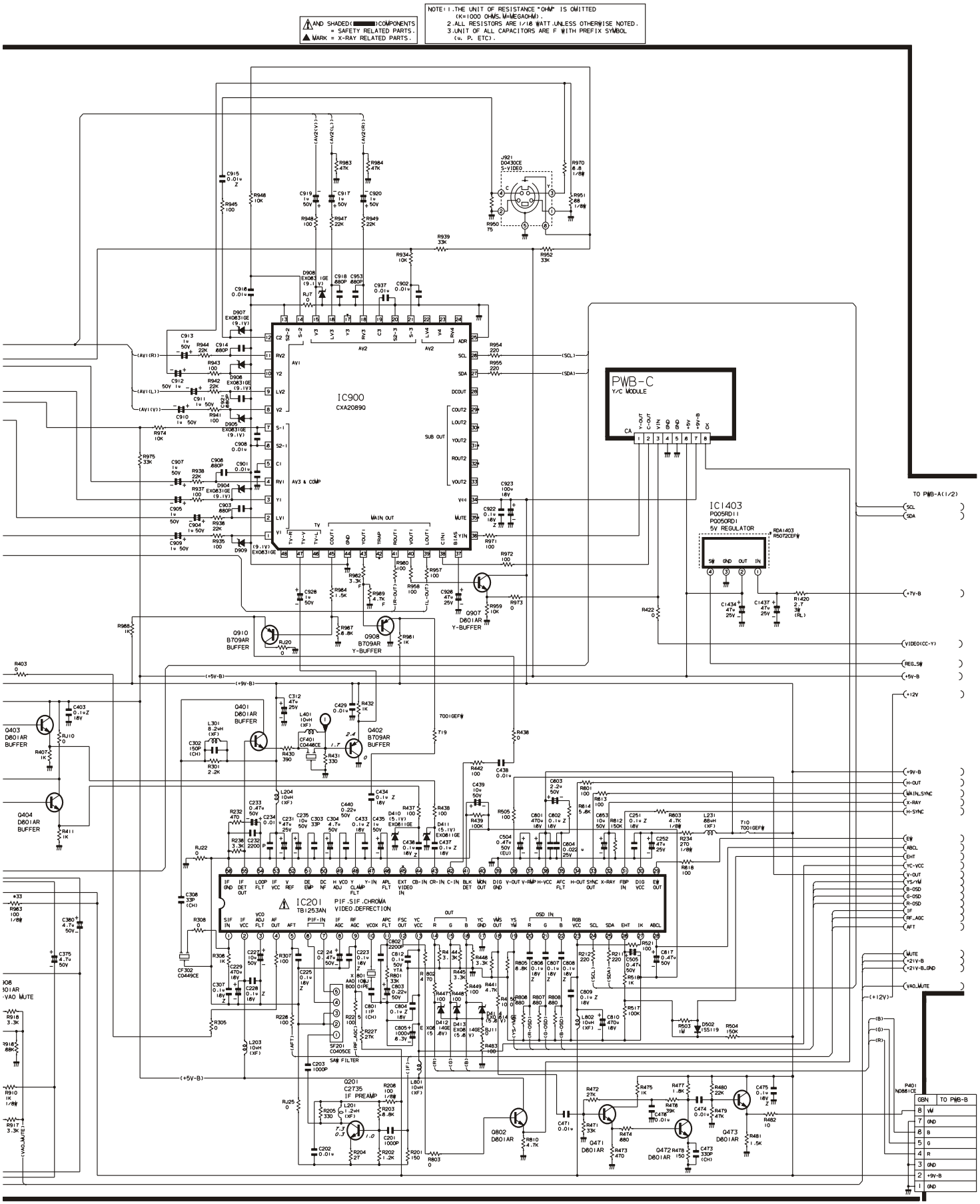
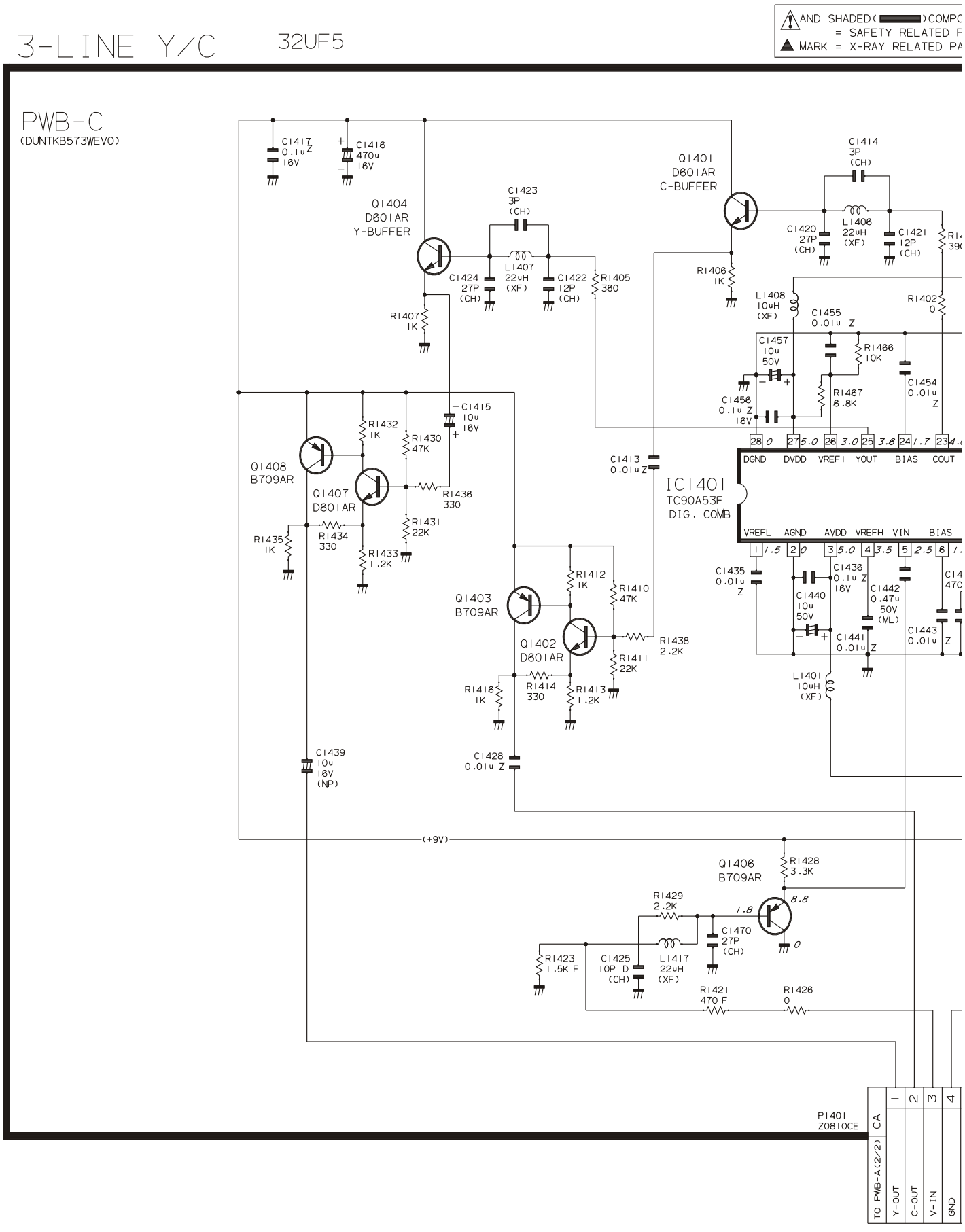
R2528
0


NOTE: 1.THE UNIT OF RESISTANCE "OHM" IS OMITTED
(K=1000 OHMS, M=MEGAOHM).
2.ALL RESISTORS ARE 1/18 WATT.UNLESS OTHERWISE NOTED.
3.UNIT OF ALL CAPACITORS ARE F WITH PREFIX SYMBOL
(u, P, ETC).
AND SHADED( )COMPONENTS = SAFETY RELATED PARTS.
MARK = X-RAY RELATED PARTS.
PWB-H
DF MODULE
IC101
P0050ES1
5V REGULATOR
IC501
TDA8177+
VERT. OUT
PUMP UP
AMP
-VCC
VCC
Q872
A1268-Y
SIDE PIN DRIVE
Q873
D1830
SIDE PIN AMP
Q771
A1091-O
Q770
C3333
IC751
P009RD11
9V-B REGULATOR
IC703
SE135N
ERROR AMP
Q757
C3198-G
Q758
A1268-Y
Q451
A1268-Y
ACL/ABL
Q801
C2482
HORIZ DRIVER
Q602
C5450++
D2648++
HORIZ OUT
Q0771
A1268-Y
V-REVERSE AMP
SIDE PIN AMP
HORIZ. DRIVE
HORIZ OUT
ANODE
FOCUS
SCREEN
(+5V)
(+27V)
(+14V)
(-14V)
(+12V)
(+7V-B)
(+200V)
(+130V)
(EHT)
(+21V-B)
(+21V-B_GND)
(X-RAY)
(H-SYNC)
(H-OUT)
(V-OUT)
(V-VCC)
(KEY)
(ON-T)
(V-LIM)
P2003
N0561CE
P802
N0781CE
P803
N0181FJ
P804
N0157FJ
P821
N0781CE
P801
N0181FJ
P851
N0361CE
S6801
H0025CEZZ
T602
FA041WJ
HORIZ OUT
T801
Z0057PE
Z0731CE
HORIZ. DRIVE
DY801
H0108ME
H0109ME
H0104ME


MAIN2 32UF5
PWB-A(2/2)
(DUNTKB587FMZ4)
VAO
VIDEO1
VIDEO 3 & COMP-S
COMP
VIDEO (YELLOW)
AUDIO-L (WHITE)
AUDIO-R (RED)
J1401
J11015EZZ
IN OUT JACK
P1301
N0681CE
TO PWB-F
AV2(R)
GND
AV2(L)
GND
AV2(V)
S-3
IC3001
CXA2074Q
M.T.S.
PWB-S
AUDIO MODULE
IC3611
AN5277
AUDIO OUT
RDA381
R0258PEFW
0902
D801AR
L-AUDIO AMP
0901
D801AR
L-AUDIO
BUFFER
0908
D801AR
L-VAO MUTE
0904
D801AR
R-AUDIO AMP
0903
D801AR
R-AUDIO
BUFFER
0905
D801AR
R-VAO MUTE
0403
D801AR
BUFFER
0404
D801AR
BUFFER
Q361
B709AR
D361
1SS119
D362
1SS119
SP2
VSP1208PB708A
8ohm 7W
SP2
VSP1208PB648A
8ohm 7W
SP1
VSP1208PB648A
8ohm 7W
SP1
VSP1208PB708A
8ohm 7W
P361
N0481CE
(+9V-B)
(SCL)
(SDA)
(L-OUT)
(R-OUT)
(+12V)
(MUTE)
(+21V-B_SW)
(+21V-B)
(VAO_MUTE)


NOTE: 1.THE UNIT OF RESISTANCE "OHM" IS OMITTED (K=1000 OHMS, M=MEGAOHM).
2.ALL RESISTORS ARE 1/16 WATT UNLESS OTHERWISE NOTED.
3.UNIT OF ALL CAPACITORS ARE F WITH PREFIX SYMBOL (u, P, ETC).
AND SHADED( )COMPONENTS = SAFETY RELATED PARTS.
MARK = X-RAY RELATED PARTS.
IC900 CXA2089Q
IC201 TB1253AN PIF.SIF.CHROMA VIDEO.DEFRECTION
IC1403 P005RD1I P005RD1I 5V REGULATOR
PWB-C Y/C MODULE
J921 D0430CE S-VIDEO
Q201 C2735 IF PREAMP
Q802 D801AR
Q803 D801AR
Q471 D801AR
Q472 D801AR
Q473 D801AR
0907 D801AR Y-BUFFER
0908 B709AR Y-BUFFER
0910 B709AR BUFFER
0401 D801AR BUFFER
0402 B709AR BUFFER
0403 D801AR BUFFER
0404 D801AR BUFFER
SF201 C0405CE SAW FILTER
CF302 C0449CE
CF401 C0446CE
X801 A4010BJ
TO PWB-A(1/2)
P401 N0861CE
GBN | TO PWB-B
8 VM
7 GND
6 B
5 G
4 R
3 GND
2 +9V-B
1 GND

3-LINE Y/C 32UF5



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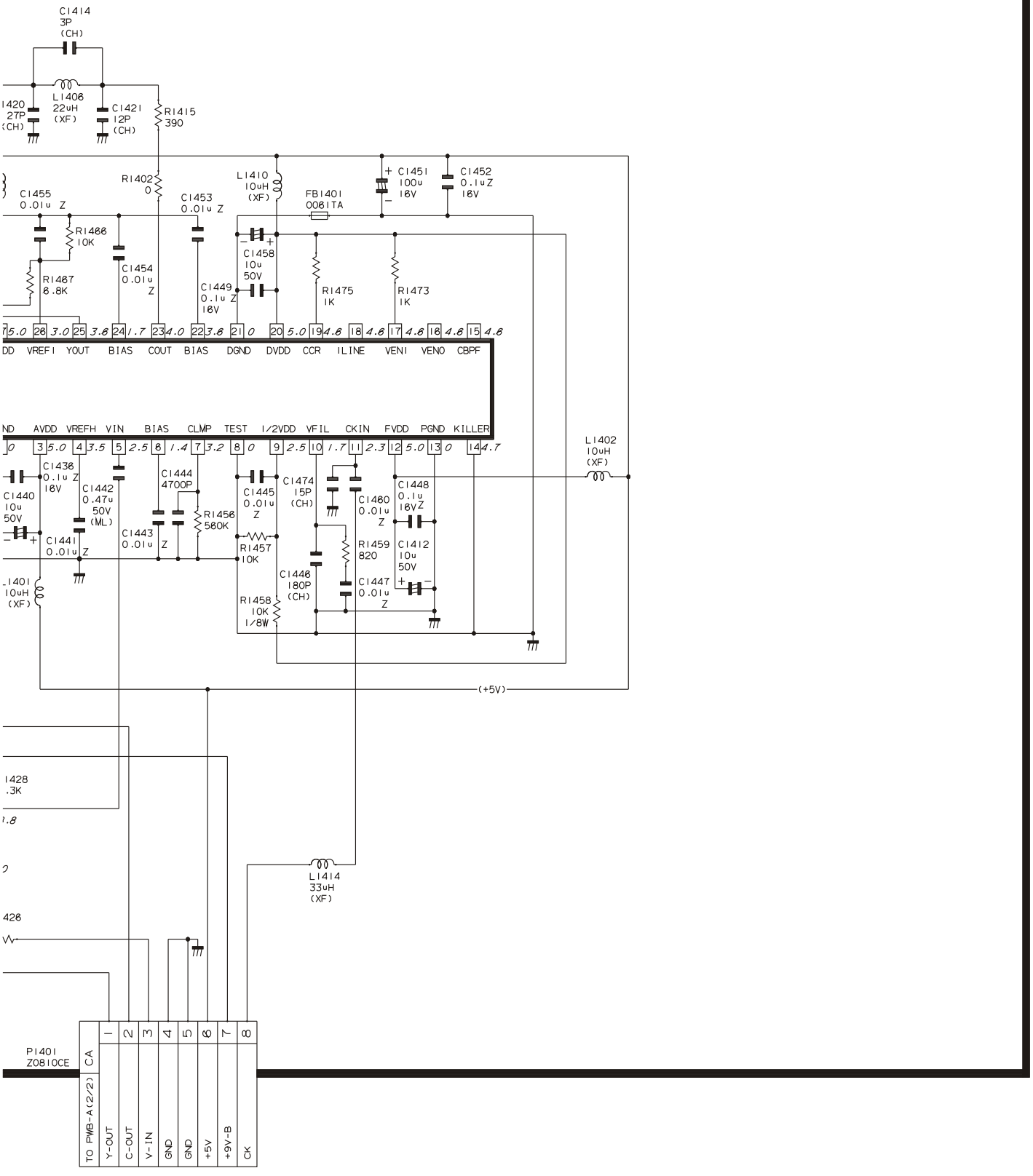
2.ALL RESISTORS ARE 1/16 WATT.UNLESS OTHERWISE NOTED.
3.UNIT OF ALL CAPACITORS ARE F WITH PREFIX SYMBOL
(u. P. ETC).

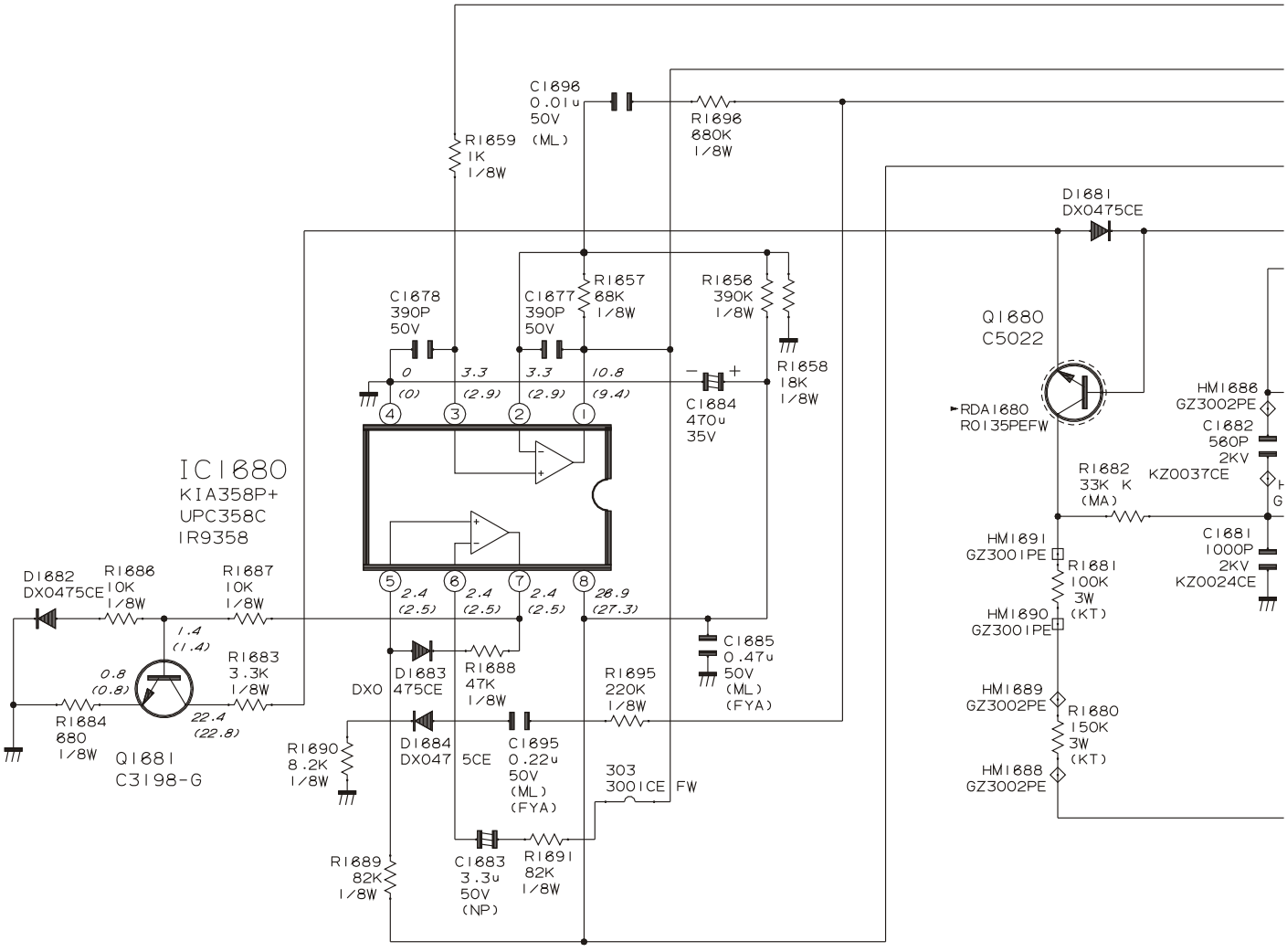
AND SHADED( ) COMPONENTS
= SAFETY RELATED PARTS.
MARK = X-RAY RELATED PARTS.



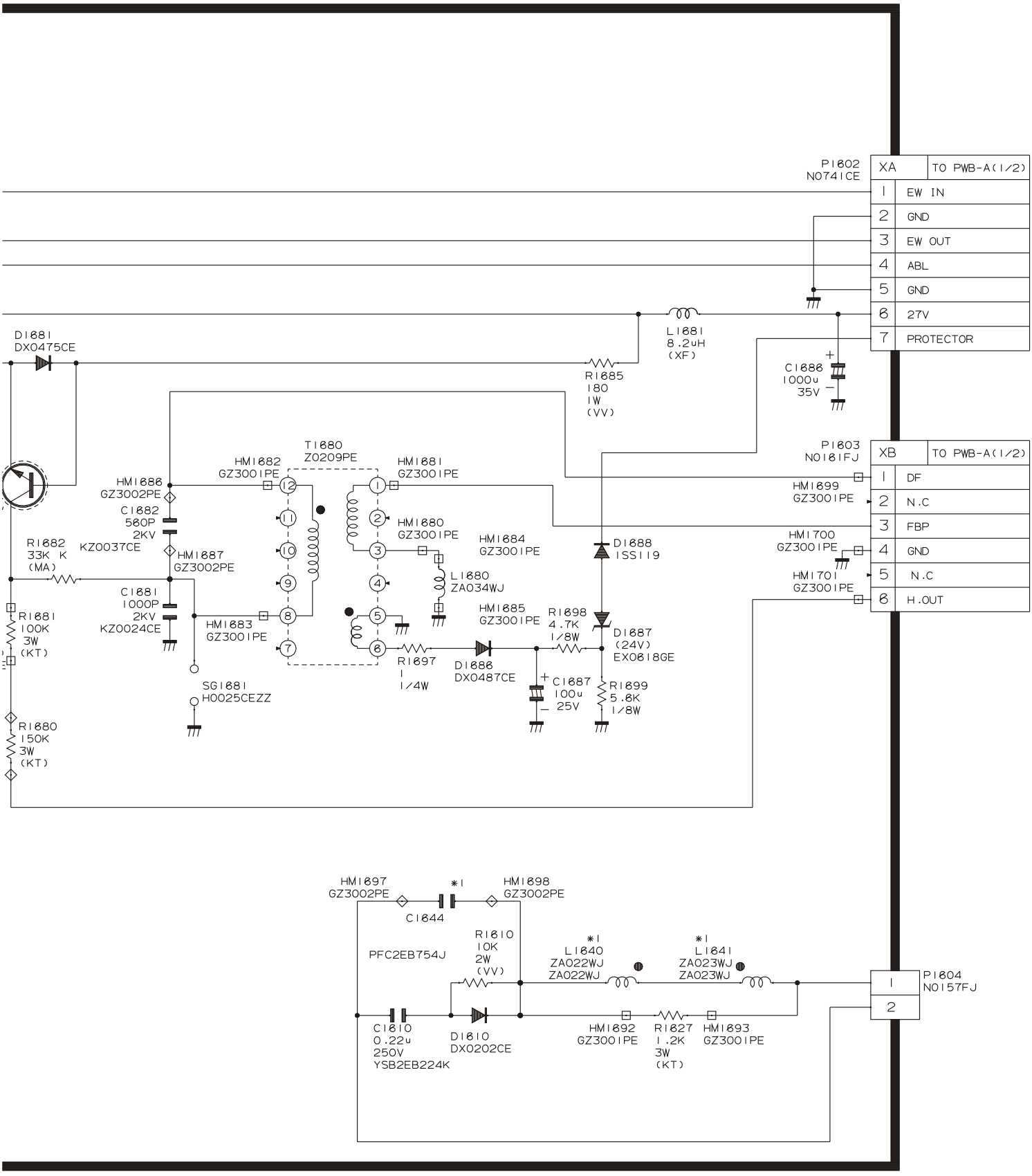
NOTE :

DF MODULE 32UF5

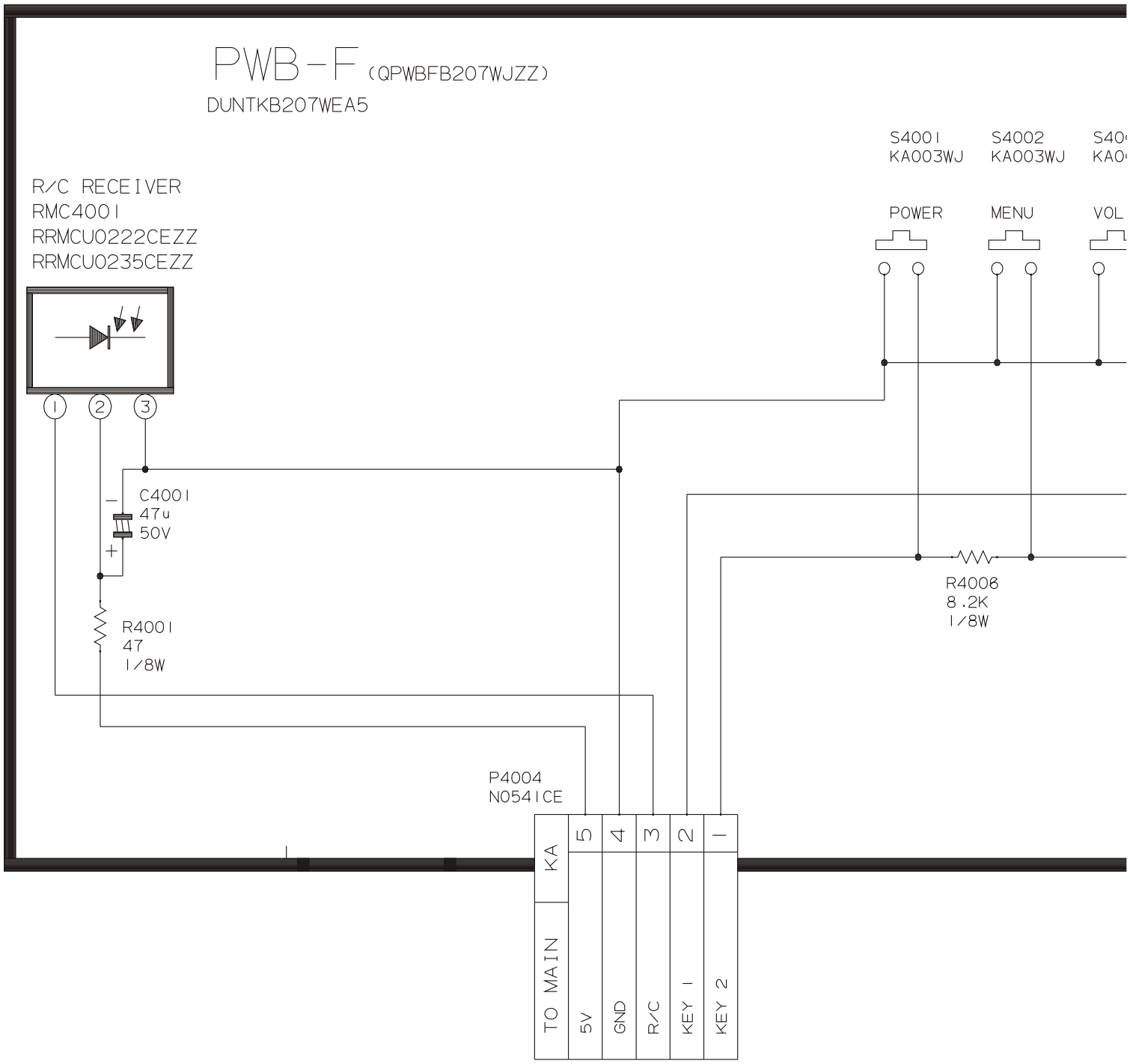
PWB-H
(DUNTKB569WEVO)



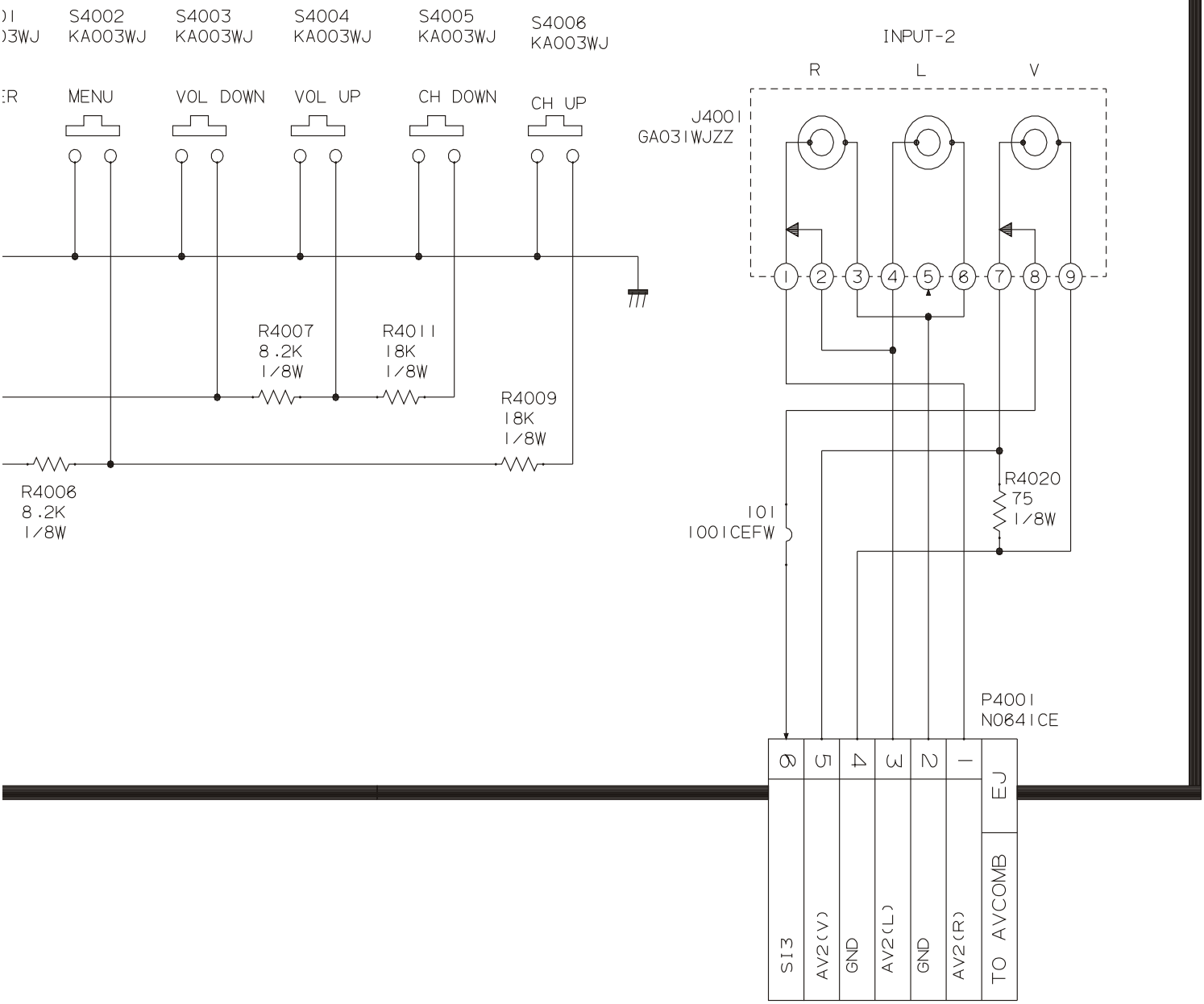
NOTE: 1.THE UNIT OF RESISTANCE "OHM" IS OMITTED
(K=1000 OHMS. M=MEGAOHM).
2.THE UNIT OF ALL CAPACITORS ARE F WITH PREFIX SYMBOL
(u. P. ETC).



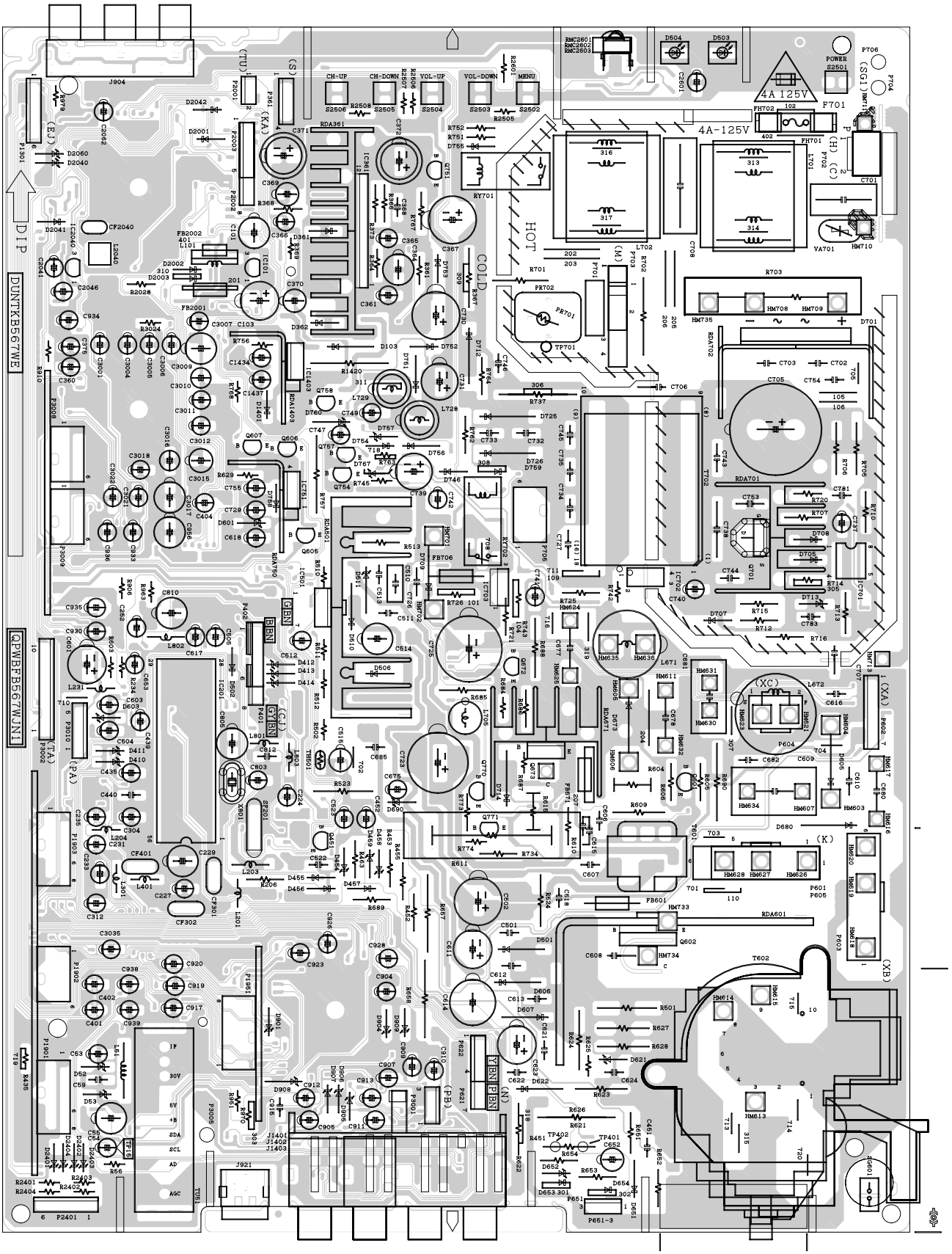
CONTROL 32UF5



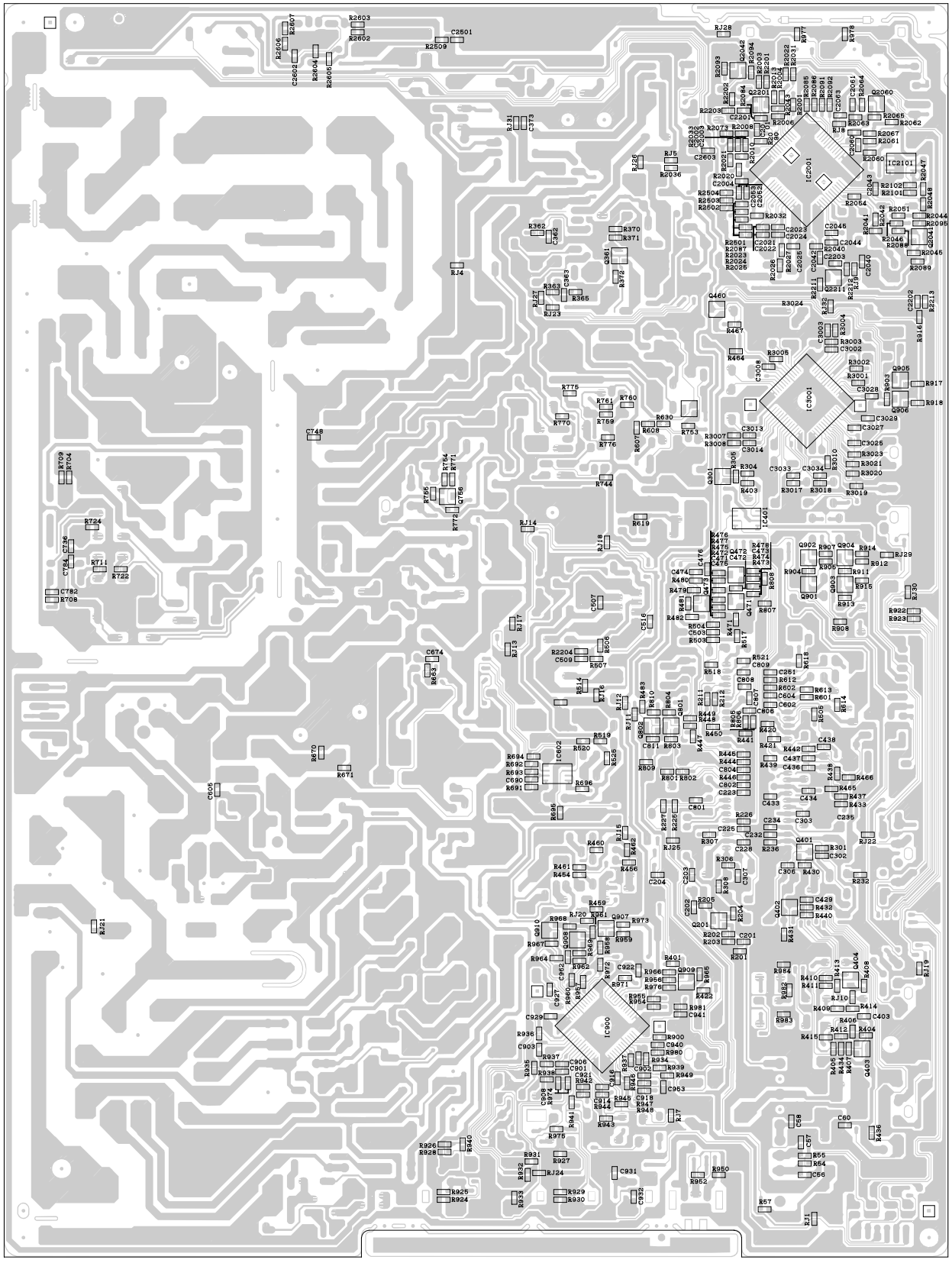
NOTE: 1.THE UNIT OF RESISTANCE "OHM" IS OMITTED
(K=1000 OHMS, M=MEGAOHM).
2.THE UNIT OF ALL CAPACITORS ARE F WITH PREFIX SYMBOL
(u, P, ETC).



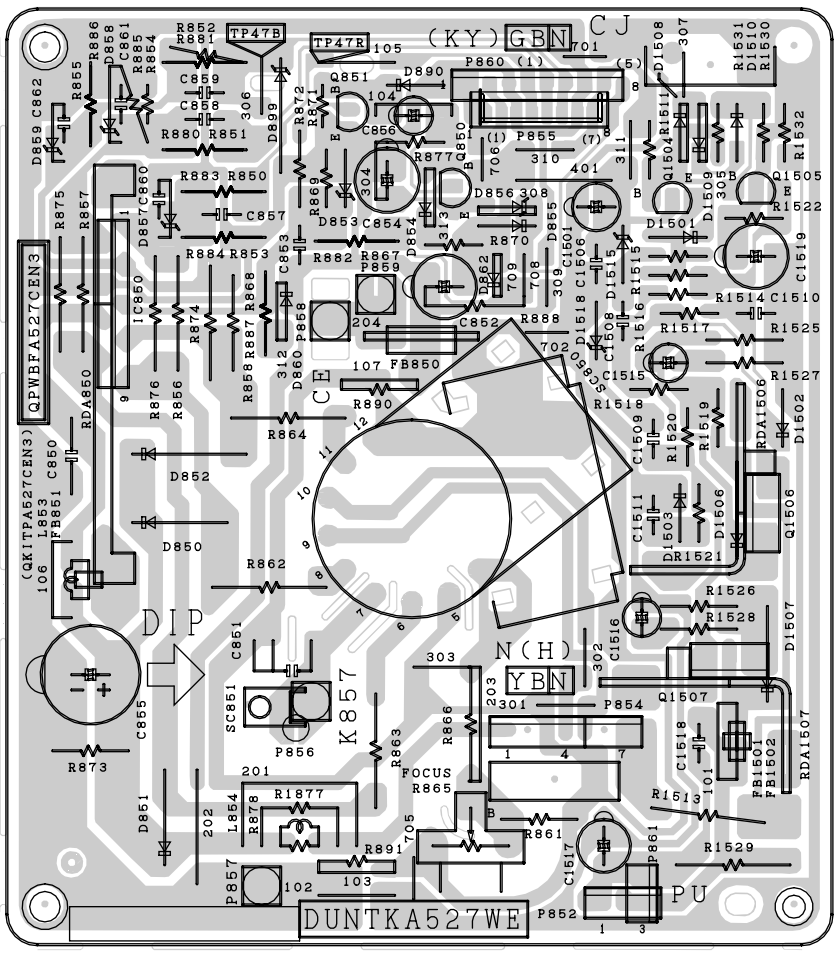
PRINTED WIRING BOARD ASSEMBLIES



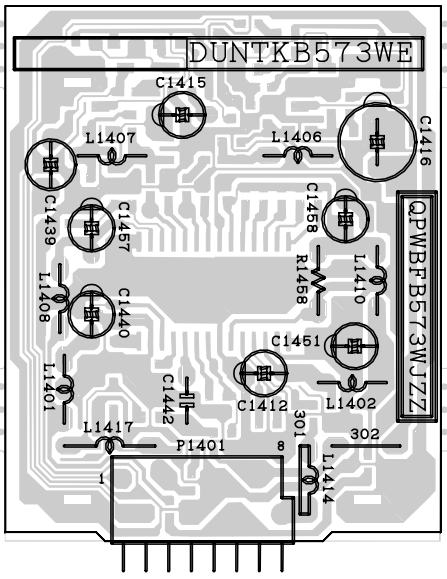
PWB-A: MAIN Unit (Components Side)



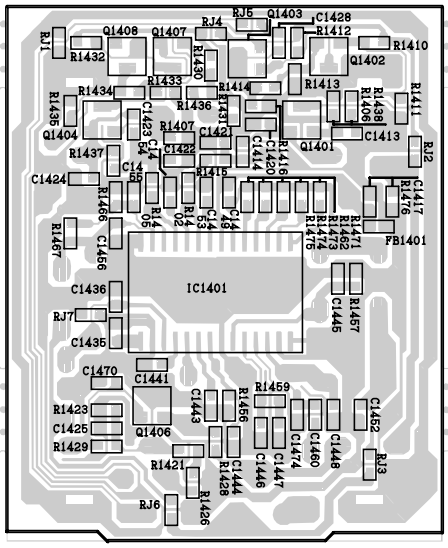
PWB-A: MAIN Unit (Chip Parts Side)



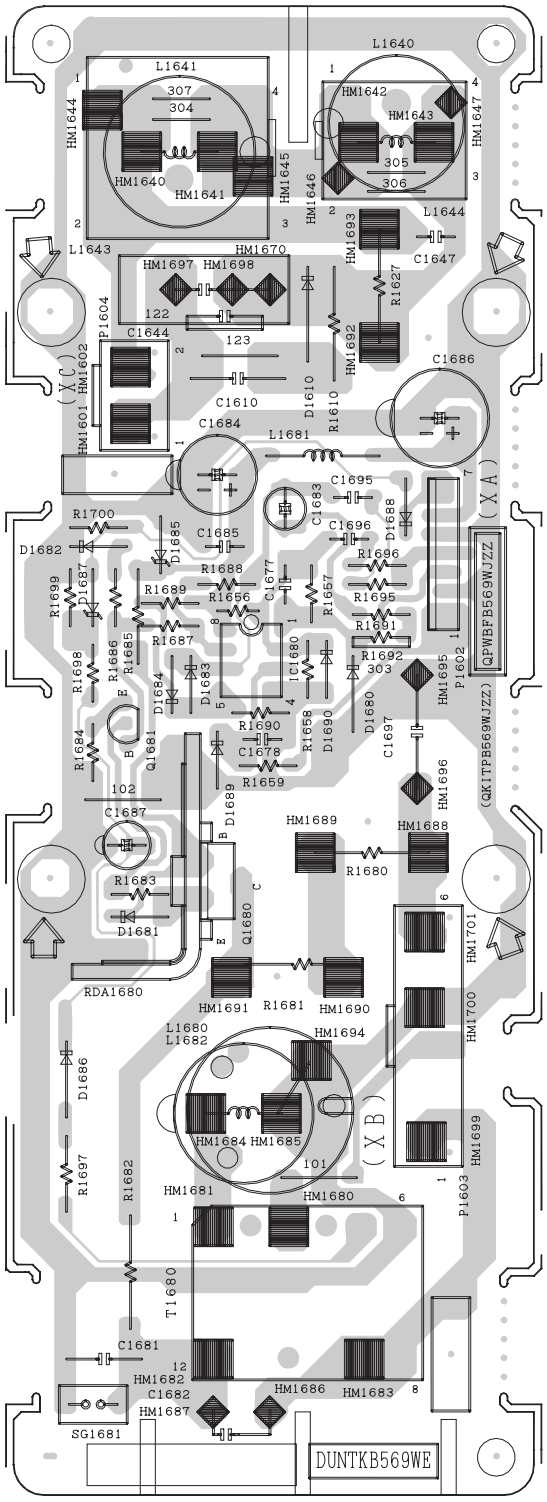
PWB-B: CRT Unit (Wiring Side)



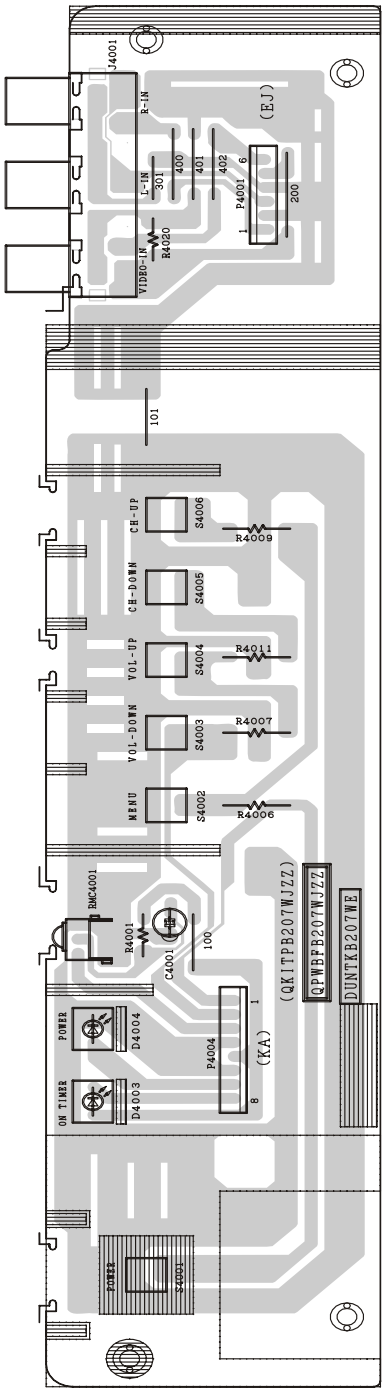
PWB-C: 3-LINE Y/C Unit (Wiring Side)



PWB-C: 3-LINE Y/C Unit (Chip Parts Side)



PWB-H: DF MODULE Unit (Wiring Side)



PWB-F: CONTROL Unit(32F631 ONLY)
(Wiring Side)

PARTS LIST

PARTS REPLACEMENT

Replacement parts which have these special safety characteristics identified in this manual ; electrical components having such features are identified by ⚠ and shaded areas in the Replacement Parts Lists and Schematic Diagrams. The use of a substitute replacement part which does no have the same safety characteristic as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION

in **USA**: Contact your nearest SHARP Parts Distributor to order. For location of SHARP Parts Distributor, Please call Toll-Free; 1-800-BE-SHARP

★ MARK: SPARE PARTS-DELIVERY SECTION

▲ MARK: X-RAY RELATED PARTS

Ref. No.	Part No.	★	Description	Code

PICTURE TUBE

▲⚠	V101	VB80AJZ90X+3E	X	Picture Tube	CX
⚠	L703	RCiLGA045WJZZ	X	Degaussing Coil	AN
		QEARCA006WJZZ	X	Ground-Part	AD

PRINTED WIRING BOARD ASSEMBLIES
(NOT REPLACEMENT ITEM)

PWB-A	DUNTKB567WEZ4	– Main Unit(32UF5)	—
PWB-B	DUNTKA527WEV9	– CRT Unit	—
PWB-C	DUNTKB573WEV0	– 3-Line Y/C Unit	—
PWB-F	DUNTKB207WEA5	– Control Unit(32F631)	—
PWB-H	DUNTKB569WEV0	– DF Module Unit	—

Ref. No.	Part No.	★	Description	Code

PWB-A: DUNTKB567WEZ4(32UF5)

MAIN UNIT

TUNER

NOTE: THE PARTS HERES SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.

⚠	TU51	VTUVTST5UF740	X	VHF Tuner	AR

INTEGRATED CIRCUITS

	IC101	VHiPQ050ES1-1+	X	PQ050ES1MXP	AB
▲⚠	IC201	VHiTB1253AN-1	X	TB1253AN	AP
⚠	IC361	VHiAN5277//-1	X	AN5277	AG
⚠	IC501	VHiTDA8177+-1	X	TDA8177	AE
⚠	IC701	VHiTEA1507/-1	X	TEA1507P/N1	AF
▲⚠	IC703	VHiSE135N++-F	X	I.C.	AD
	IC751	VHiPQ09RD11-1	X	PQ09RD11	AD
	IC900	VHiCXA2089Q-2Y	X	CXA2089Q-6T	AK
	IC1403	VHiPQ05RD11-1	X	PQ05RD11	AD
	IC2001	RH-iXA418WJZZQ	X	TMP88CS38BFG	AN
	IC2040	VHiKiA7045A-1+	X	KIA7045AP	AB
	IC2101	VHiBR2416E2-1*	X	BR24C16F	AD
	IC3001	VHiCXA2074Q-1*	X	CXA2074Q	AN

TRANSISTORS

	Q201	VS2SC2735//1E*	X	2SC2735	AB
	Q361	VS2SB709AR/-1*	X	2SB709AR	AB
	Q401	VS2SD601AR/-1*	X	2SD601AR	AB
	Q402	VS2SB709AR/-1*	X	2SB709AR	AB
	Q403	VS2SD601AR/-1*	X	2SD601AR	AB
	Q404	VS2SD601AR/-1*	X	2SD601AR	AB
	Q451	VS2SA1266-Y-1+	X	2SA1266-Y	AB
	Q460	VSRT1N441C/-1*	X	RT1N441C	AB
	Q471	VS2SD601AR/-1*	X	2SD601AR	AB
	Q472	VS2SD601AR/-1*	X	2SD601AR	AB
	Q473	VS2SD601AR/-1*	X	2SD601AR	AB
	Q601	VS2SC2482//-1+	X	2SC2482	AB
⚠	Q602	VS2SC5450++1E	X	2SC5450++	AH
	Q672	VS2SA1266-Y-1+	X	2SA1266-Y	AB
	Q673	VS2SD1830//1E	X	2SD1830	AD
⚠	Q701	VSSPA11N603-1	X	SPA11N603	AK
	Q751	VS2SC3198-G-1+	X	2SC3198-G	AB
	Q755	VS2SD601AR/-1*	X	2SD601AR	AB
	Q756	VS2SD601AR/-1*	X	2SD601AR	AB
	Q757	VS2SC3198-G-1+	X	2SC3198-G	AB
	Q758	VS2SA1266-Y-1+	X	2SA1266-Y	AB
	Q770	VS2SC3333//-1+	X	2SC3333	AB
	Q771	VS2SA1091-O1A+	X	2SA1091-O1	AC
	Q802	VS2SD601AR/-1*	X	2SD601AR	AB
	Q901	VS2SD601AR/-1*	X	2SD601AR	AB
	Q902	VS2SD601AR/-1*	X	2SD601AR	AB
	Q903	VS2SD601AR/-1*	X	2SD601AR	AB
	Q904	VS2SD601AR/-1*	X	2SD601AR	AB
	Q905	VS2SD601AR/-1*	X	2SD601AR	AB
	Q906	VS2SD601AR/-1*	X	2SD601AR	AB
	Q907	VS2SD601AR/-1*	X	2SD601AR	AB
	Q908	VS2SB709AR/-1*	X	2SB709AR	AB
	Q910	VS2SB709AR/-1*	X	2SB709AR	AB
	Q2060	VS2SD601AR/-1*	X	2SD601AR	AB
	Q2201	VS2SD601AR/-1*	X	2SD601AR	AB
	Q2211	VS2SD601AR/-1*	X	2SD601AR	AB

DIODES

	D52	RH-EX0676GEZZ*	X	Zener Diode, 32V	AB
	D103	RH-DX0441CEZZ*	X	Diode	AB
	D361	VHD1SS119//-1*	X	1SS119	AB
	D362	VHD1SS119//-1*	X	1SS119	AB
	D410	RH-EX0611GEZZ*	X	Zener Diode, 5.1V	AB
	D411	RH-EX0611GEZZ*	X	Zener Diode, 5.1V	AB
	D412	RH-EX0614GEZZ*	X	Zener Diode, 5.6V	AB
	D413	RH-EX0614GEZZ*	X	Zener Diode, 5.6V	AB
	D414	RH-EX0614GEZZ*	X	Zener Diode, 5.6V	AB

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MAIN UNIT (Continued)

Ref. No.	Part No.	★	Description	Code
D454	RH-EX0628GEZZ*	X	Zener Diode, 8.2V	AB
D455	VHD1SS119//-1*	X	1SS119	AB
D501	RH-DX0302CEZZ*	X	Diode	AB
D502	VHD1SS119//-1*	X	1SS119	AB
D510	RH-DX0441CEZZ*	X	Diode	AB
⚠ D605	RH-DX0255CEZZ	X	Diode	AD
⚠ D606	RH-DX0302CEZZ*	X	Diode	AB
D607	RH-DX0471CEZZ*	X	Diode	AB
D621	RH-EX0631GEZZ*	X	Zener Diode, 9.1V	AB
⚠ D622	RH-DX0131CEZZ*	X	Diode	AB
▲⚠ D651	VHD1SS244//-1*	X	1SS244	AB
▲⚠ D652	RH-EX0641GEZZ*	X	Zener Diode, 12V	AB
▲⚠ D653	VHD1SS119//-1*	X	1SS119	AB
▲⚠ D654	VHD1SS119//-1*	X	1SS119	AB
⚠ D673	RH-DXA006WJZZ	X	Diode	AB
D680	RH-DX0484CEZZ	X	Diode	AC
⚠ D701	RH-DX0477CEZZ	X	Diode	AE
D707	VHD1SS244//-1*	X	1SS244	AB
D708	VHD1SS244//-1*	X	1SS244	AB
⚠ D709	RH-DXA006WJZZ	X	Diode	AB
D712	RH-DX0468CEZZ	X	Diode	AB
D725	RH-DX0302CEZZ*	X	Diode	AB
D726	RH-DX0461CEZZ	X	Diode	AB
D751	VHD1SS119//-1*	X	1SS119	AB
D752	VHD1SS119//-1*	X	1SS119	AB
D753	VHD1SS119//-1*	X	1SS119	AB
D754	VHD1SS119//-1*	X	1SS119	AB
D755	VHD1SS119//-1*	X	1SS119	AB
D756	VHD1SS119//-1*	X	1SS119	AB
D757	RH-EX0619GEZZ*	X	Zener Diode, 6.2V	AB
D904	RH-EX0631GEZZ*	X	Zener Diode, 9.1V	AB
D905	RH-EX0631GEZZ*	X	Zener Diode, 9.1V	AB
D906	RH-EX0631GEZZ*	X	Zener Diode, 9.1V	AB
D907	RH-EX0631GEZZ*	X	Zener Diode, 9.1V	AB
D908	RH-EX0631GEZZ*	X	Zener Diode, 9.1V	AB
D909	RH-EX0631GEZZ*	X	Zener Diode, 9.1V	AB
D2001	VHD1SS119//-1*	X	1SS119	AB
D2040	RH-EX0619GEZZ*	X	Zener Diode, 6.2V	AB
D2060	RH-EX0619GEZZ*	X	Zener Diode, 6.2V	AB
⚠ IC702	RH-FXA003WJZZ	X	PC123Y82	AB

PACKAGED CIRCUITS

TH501	RH-HZ0004GEZZ+	X	Thermistor	AB
⚠ VA701	RH-VXA009WJZZ	X	Varistor	AB
⚠ PR701	RMPTP0092CEZZ	X	Packaged Circuit	AD
X801	RCRSAA010WJZZ	X	Crystal	AC

FILTERS

CF302	RFiLC0449CEZZ+	X	Filter	AB
CF401	RFiLC0446CEZZ+	X	Filter	AB
SF201	RFiLC0405CEZZ	X	Filter	AD

COILS

L51	VP-CF100K0000*	X	Peaking, 10µH	AB
L201	VP-XF1R2K0000*	X	Peaking, 1.2µH	AB
L203	VP-XF100K0000*	X	Peaking, 10µH	AB
L204	VP-XF100K0000*	X	Peaking, 10µH	AB
L231	VP-XF680K0000*	X	Peaking, 68µH	AB
L301	VP-XF8R2K0000*	X	Peaking, 8.2µH	AB
L401	VP-XF100K0000*	X	Peaking, 10µH	AB
L671	RCiLZ1005CEZZ	X	Coil	AD
L701	RCiLF0345CEZZ	X	Coil	AD
L702	RCiLF0345CEZZ	X	Coil	AD
L705	RCiLP0179CEZZ+	X	Coil	AB
L728	RCiLP0179CEZZ+	X	Coil	AB
L729	RCiLP0179CEZZ+	X	Coil	AB
L801	VP-XF100K0000*	X	Peaking, 10µH	AB
L802	VP-XF100K0000*	X	Peaking, 10µH	AB
L2040	RCiLBA003WJZZ	X	Oscillation Coil	AB

Ref. No.	Part No.	★	Description	Code

TRANSFORMERS

⚠ T601	RTRNZ0057PEZZ	X	Transformer	AD
▲⚠ T602	RTRNFA041WJZZ	X	H-Volt Transformer	AW
⚠ T702	RTRNWA072WJZZ	X	Transformer	AH

CAPACITORS

C53	VCEA0A1HW105M+X	1	50V	Electrolytic	AB
C54	VCEA0A1HW475M+X	4.7	50V	Electrolytic	AB
C55	VCEA0A0JW108M+ X	1000	6.3V	Electrolytic	AB
C58	VCKYCY1HF103Z* X	0.01	50V	Ceramic	AA
C59	VCKYPA1HF103Z+ X	0.01	50V	Ceramic	AA
C101	VCEA0A0JW108M+ X	1000	6.3V	Electrolytic	AB
C103	VCEA0A1CW108M+X	1000	16V	Electrolytic	AB
C201	VCKYCY1HB102K* X	1000p	50V	Ceramic	AA
C202	VCKYCY1HB103K* X	0.01	50V	Ceramic	AA
C203	VCKYCY1HB102K* X	1000p	50V	Ceramic	AA
C223	VCKYCY1CF104Z* X	0.1	16V	Ceramic	AA
C224	VCEA0A1HW474M+X	0.47	50V	Electrolytic	AB
C225	VCKYCY1CF104Z* X	0.1	16V	Ceramic	AA
C227	VCEA0A1HW106M+X	10	50V	Electrolytic	AB
C228	VCKYCY1CF104Z* X	0.1	16V	Ceramic	AA
C229	VCEA0A1CW477M+X	470	16V	Electrolytic	AB
C231	VCEA0A1EW476M+X	47	25V	Electrolytic	AB
C232	VCKYCY1HB222K* X	2200p	50V	Ceramic	AA
C233	VCEA0A1HW474M+X	0.47	50V	Electrolytic	AB
C234	VCKYCY1HB103K* X	0.01	50V	Ceramic	AA
C235	VCEA0A1HW106M+X	10	50V	Electrolytic	AB
C251	VCKYCY1CF104Z* X	0.1	16V	Ceramic	AA
C252	VCEA0A1EW476M+X	47	25V	Electrolytic	AB
C302	VCCCCY1HH151J* X	150p	50V	Ceramic	AA
C303	VCCCCY1HH330J* X	33p	50V	Ceramic	AA
C304	VCEA0A1HW475M+X	4.7	50V	Electrolytic	AB
C306	VCCCCY1HH330J* X	33p	50V	Ceramic	AA
C307	VCKYCY1CF104Z* X	0.1	16V	Ceramic	AA
C312	VCEA0A1EW476M+X	47	25V	Electrolytic	AB
C360	VCEA0A1HW475M+X	4.7	50V	Electrolytic	AB
C361	VCEA0A1HW105M+X	1	50V	Electrolytic	AB
C362	VCKYCY1EB223K* X	0.022	25V	Ceramic	AA
C363	VCKYCY1EB223K* X	0.022	25V	Ceramic	AA
C364	VCEA0A1EW227M+X	220	25V	Electrolytic	AB
C365	VCEA0A1HW105M+X	1	50V	Electrolytic	AB
C366	VCEA0A1HW106M+X	10	50V	Electrolytic	AB
C367	VCEA0A1VW108M+X	1000	35V	Electrolytic	AB
C368	VCKYPA1HF103Z+ X	0.01	50V	Ceramic	AA
C369	VCEA0A1CW227M+X	220	16V	Electrolytic	AB
C370	VCEA0A1CW227M+X	220	16V	Electrolytic	AB
C371	VCEA0A1EW108M+X	1000	25V	Electrolytic	AB
C372	VCEA0A1EW108M+X	1000	25V	Electrolytic	AB
C373	VCKYCY1HB103K* X	0.01	50V	Ceramic	AA
C375	VCEA0A1HW475M+X	4.7	50V	Electrolytic	AB
C401	VCEA0A1HW106M+X	10	50V	Electrolytic	AB
C402	VCEA0A1HW106M+X	10	50V	Electrolytic	AB
C403	VCKYCY1CF104Z* X	0.1	16V	Ceramic	AA
C429	VCKYCY1HB103K* X	0.01	50V	Ceramic	AA
C433	VCKYCY1CF104Z* X	0.1	16V	Ceramic	AA
C434	VCKYCY1CF104Z* X	0.1	16V	Ceramic	AA
C435	VCEA0A1HW105M+X	1	50V	Electrolytic	AB
C436	VCKYCY1CF104Z* X	0.1	16V	Ceramic	AA
C437	VCKYCY1CF104Z* X	0.1	16V	Ceramic	AA
C438	VCKYCY1HB103K* X	0.01	50V	Ceramic	AA
C439	VCEA0A1HW106M+X	10	50V	Electrolytic	AB
C440	VCFYFA1HA224J+ X	0.22	50V	Mylar	AB
C451	VCQYTA2AA104K+ X	0.1	100V	Mylar	AB
C452	VCEA0A1EW336M+X	33	25V	Electrolytic	AB
C471	VCKYCY1HB103K* X	0.01	50V	Ceramic	AA
C473	VCCCCY1HH331J* X	330p	50V	Ceramic	AB
C474	VCKYCY1HB103K* X	0.01	50V	Ceramic	AA
C475	VCKYCY1CF104Z* X	0.1	16V	Ceramic	AA
C476	VCKYCY1HB103K* X	0.01	50V	Ceramic	AA
C501	VCKYPA2HB102K+ X	1000p	500V	Ceramic	AB
C502	VCEA0A1VW477M+X	470	35V	Electrolytic	AB
C504	VCEACA1HC474M+X	0.47	50V	Electrolytic	AB
C505	VCEA0A1HW474M+X	0.47	50V	Electrolytic	AB
C506	VCKYCY1HB103K* X	0.01	50V	Ceramic	AA
C507	VCKYCY1HB103K* X	0.01	50V	Ceramic	AA

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MAIN UNIT (Continued)

Ref. No.	Part No.	★			Description	Code
C510	RC-FZ0272CEZZ+	X	0.39	100V		AB
C512	VCEA0A1EW476M+	X	47	25V	Electrolytic	AB
C514	VCEA0A1VW107M+	X	100	35V	Electrolytic	AB
C516	VCKYCY1HB472K*	X	4700p	50V	Ceramic	AA
C518	VCQYTA2AA473J+	X	0.047	100V	Mylar	AB
C522	VCFYFA1HA334J+	X	0.33	50V		AB
C523	VCEA0A1HW105M+	X	1	50V	Electrolytic	AB
C601	VCEA0A1CW477M+	X	470	16V	Electrolytic	AB
C602	VCKYCY1CF104Z*	X	0.1	16V	Ceramic	AA
C603	VCEA0A1HW225M+	X	2.2	50V	Electrolytic	AB
C604	VCKYCY1EB223K*	X	0.022	25V	Ceramic	AA
C606	VCKYPA2HB102K+	X	1000p	500V	Ceramic	AB
C607	VCKYPA1HB472K+	X	4700p	50V	Ceramic	AB
C608	RC-KZ0033CEZZ	X	150p	2kV	Ceramic	AB
▲⚠ C609	VCFPVC3ZA223H	X	0.022	1500V		AB
			Metallzed Polypro Film			
C611	VCEA0A1EW477M+	X	470	25V	Electrolytic	AB
C614	VCEA0A1EW108M+	X	1000	25V	Electrolytic	AB
C615	VCFYSB2EB823J	X	0.082	250V	Mylar	AB
C616	VCKYPA2HB471K+	X	470p	500V	Ceramic	AB
C617	VCEA0A1HW474M+	X	0.47	50V	Electrolytic	AB
C622	VCKYPA2HB102K+	X	1000p	500V	Ceramic	AB
C623	VCEA4A2EN106M+	X	10	250V	Electrolytic	AB
C652	VCEA0A1HW476M+	X	47	50V	Electrolytic	AB
C653	VCEA0A1HW106M+	X	10	50V	Electrolytic	AB
C674	VCKYCY1HB391K*	X	390p	50V	Ceramic	AA
C675	VCEA0A1HW106M+	X	10	50V	Electrolytic	AB
C677	RC-FZ0377CEZZ	X	4.7	50V	Mylar	AD
▲⚠ C678	VCQPPC2GB563J	X	0.056	400V	Mylar	AB
C680	VCFPVC3ZA822H	X	8200p	1500V		AB
			Metallzed Polypro Film			
⚠ C701	RC-FZA022WJZZ	X	0.22	AC250V		AB
C702	RC-KZ0029CEZZ+	X	0.01	AC250V	Ceramic	AB
C703	RC-KZ0029CEZZ+	X	0.01	AC250V	Ceramic	AB
⚠ C705	RC-EZ0722CEZZ	X	820	200V	Electrolytic	AG
⚠ C706	RC-KZ0089GEZZA	X	0.001	AC250V	Ceramic	AB
⚠ C707	RC-KZ0092GEZZA	X	0.0033	AC250V	Ceramic	AB
⚠ C723	RC-EZ0724CEZZ	X	100	160V	Electrolytic	AC
⚠ C725	RC-EZA065WJZZ	X	330	160V	Electrolytic	AE
C726	RC-KZ0226CEZZ+	X	560p	2kV	Ceramic	AB
C727	RC-KZ0226CEZZ+	X	560p	2kV	Ceramic	AB
C729	VCEA0A1HW106M+	X	10	50V	Electrolytic	AB
C730	VCEA4A1VN108M+	X	1000	35V	Electrolytic	AC
C731	RC-EZ0385CEZZ+	X	1000	16V	Electrolytic	AB
C732	VCKYPA2HB102K+	X	1000p	500V	Ceramic	AB
C733	VCKYPA2HB102K+	X	1000p	500V	Ceramic	AB
C734	VCKYPA2HB471K+	X	470p	500V	Ceramic	AB
C735	VCKYPA2HB471K+	X	470p	500V	Ceramic	AB
C736	VCKYCY1HF103Z*	X	0.01	50V	Ceramic	AA
C737	VCEA0A1HW226M+	X	22	50V	Electrolytic	AB
C738	VCFPVC3CA102H	X	1000p	1250V		AB
			Metallzed Polypro Film			
C739	RC-EZ0385CEZZ+	X	1000	16V	Electrolytic	AB
C740	VCEA0A1HW476M+	X	47	50V	Electrolytic	AB
C741	VCEA4A2AN105M+	X	1	100V	Electrolytic	AB
C743	RC-KZ0036CEZZ+	X	330p	2kV	Ceramic	AB
C744	VCKYPA2HB471K+	X	470p	500V	Ceramic	AB
C745	VCKYPA2HB102K+	X	1000p	500V	Ceramic	AB
C746	VCKYPA2HB102K+	X	1000p	500V	Ceramic	AB
C747	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AB
C749	VCEA0A1HW105M+	X	1	50V	Electrolytic	AB
C753	RC-KZ0036CEZZ+	X	330p	2kV	Ceramic	AB
C754	VCKYPA2HB472K+	X	4700p	500V	Ceramic	AB
C755	VCEA0A1EW476M+	X	47	25V	Electrolytic	AB
C783	VCQYTA1HM103J+	X	0.01	50V	Mylar	AB
C784	VCKYCY1HF103Z*	X	0.01	50V	Ceramic	AA
C801	VCCCCY1HH110J*	X	11p	50V	Ceramic	AA
C802	VCKYCY1HB222K*	X	2200p	50V	Ceramic	AA
C803	VCEA0A1HW224M+	X	0.22	50V	Electrolytic	AB
C804	VCKYCY1CF104Z*	X	0.1	16V	Ceramic	AA
C805	VCEA0A0JW108M+	X	1000	6.3V	Electrolytic	AB
C806	VCKYCY1CF104Z*	X	0.1	16V	Ceramic	AA
C807	VCKYCY1CF104Z*	X	0.1	16V	Ceramic	AA
C808	VCKYCY1CF104Z*	X	0.1	16V	Ceramic	AA
C809	VCKYCY1CF104Z*	X	0.1	16V	Ceramic	AA
C810	VCEA0A1CW477M+	X	470	16V	Electrolytic	AB
C812	VCQYTA1HM104J+	X	0.1	50V	Mylar	AB
C901	VCKYCY1HB103K*	X	0.01	50V	Ceramic	AA
C902	VCKYCY1HB103K*	X	0.01	50V	Ceramic	AA
C903	VCKYCY1HB681K*	X	680p	50V	Ceramic	AB
C904	VCEA0A1HW105M+	X	1	50V	Electrolytic	AB
C905	VCEA0A1HW105M+	X	1	50V	Electrolytic	AB
C906	VCKYCY1HB681K*	X	680p	50V	Ceramic	AB
C907	VCEA0A1HW105M+	X	1	50V	Electrolytic	AB
C908	VCKYCY1HB103K*	X	0.01	50V	Ceramic	AA
C909	VCEA0A1HW105M+	X	1	50V	Electrolytic	AB
C910	VCEA0A1HW105M+	X	1	50V	Electrolytic	AB
C911	VCEA0A1HW105M+	X	1	50V	Electrolytic	AB
C912	VCEA0A1HW105M+	X	1	50V	Electrolytic	AB
C913	VCEA0A1HW105M+	X	1	50V	Electrolytic	AB
C914	VCKYCY1HB681K*	X	680p	50V	Ceramic	AB
C915	VCKYPA1HF103Z+	X	0.01	50V	Ceramic	AA
C916	VCKYCY1HB103K*	X	0.01	50V	Ceramic	AA
C917	VCEA0A1HW105M+	X	1	50V	Electrolytic	AB
C918	VCKYCY1HB681K*	X	680p	50V	Ceramic	AB
C919	VCEA0A1HW105M+	X	1	50V	Electrolytic	AB
C920	VCEA0A1HW105M+	X	1	50V	Electrolytic	AB
C921	VCKYCY1HB681K*	X	680p	50V	Ceramic	AB
C922	VCKYCY1CF104Z*	X	0.1	16V	Ceramic	AA
C923	VCEA0A1CW107M+	X	100	16V	Electrolytic	AB
C926	VCEA0A1EW476M+	X	47	25V	Electrolytic	AB
C928	VCEA0A1HW105M+	X	1	50V	Electrolytic	AB
C930	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AB
C931	VCKYCY1HB183K*	X	0.018	50V	Ceramic	AB
C932	VCKYCY1HB183K*	X	0.018	50V	Ceramic	AB
C933	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AB
C934	VCEA0A1EW476M+	X	47	25V	Electrolytic	AB
C935	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AB
C936	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AB
C937	VCKYCY1HB103K*	X	0.01	50V	Ceramic	AA
C953	VCKYCY1HB681K*	X	680p	50V	Ceramic	AB
C956	VCEA0A1CW477M+	X	470	16V	Electrolytic	AB
C1434	VCEA0A1EW476M+	X	47	25V	Electrolytic	AB
C1437	VCEA0A1EW476M+	X	47	25V	Electrolytic	AB
C2001	VCCCCY1HH101J*	X	100p	50V	Ceramic	AA
C2002	VCKYCY1HF103Z*	X	0.01	50V	Ceramic	AA
C2025	VCCCCY1HH101J*	X	100p	50V	Ceramic	AA
C2040	VCKYCY1CF104Z*	X	0.1	16V	Ceramic	AA
C2041	VCEA0A1HW105M+	X	1	50V	Electrolytic	AB
C2043	VCCCCY1HH331J*	X	330p	50V	Ceramic	AB
C2044	VCCCCY1HH100D*	X	10p	50V	Ceramic	AA
C2046	VCEA0A1EW476M+	X	47	25V	Electrolytic	AB
C2060	VCKYCY1CF104Z*	X	0.1	16V	Ceramic	AA
C2061	VCCCCY1HH101J*	X	100p	50V	Ceramic	AA
C2062	VCEA0A1CW107M+	X	100	16V	Electrolytic	AB
C2063	VCKYCY1CF104Z*	X	0.1	16V	Ceramic	AA
C2064	VCKYCY1CF104Z*	X	0.1	16V	Ceramic	AA
C2201	VCKYCY1HB681K*	X	680p	50V	Ceramic	AB
C2202	VCCCCY1HH330J*	X	33p	50V	Ceramic	AA
C2501	VCKYCY1HB102K*	X	1000p	50V	Ceramic	AA
C2603	VCCCCY1HH101J*	X	100p	50V	Ceramic	AA
C3001	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AB
C3002	VCKYCY1HB562K*	X	5600p	50V	Ceramic	AB
C3003	VCKYCY1EB123K*	X	0.012	25V	Ceramic	AB
C3004	VCEA0A1HW105M+	X	1	50V	Electrolytic	AB
C3005	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AB
C3006	VCEA0A1HW106M+	X	10	50V	Electrolytic	AB
C3007	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AB
C3008	VCKYCY1CF104Z*	X	0.1	16V	Ceramic	AA
C3009	VCEA0A1CW477M+	X	470	16V	Electrolytic	AB

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MAIN UNIT (Continued)

Ref. No.	Part No.	★	Description			Code
C3010	VCE9GA1HW475M+X		4.7	50V	Electrolytic	AB
C3011	VCEA0A1HW475M+X		4.7	50V	Electrolytic	AB
C3012	VCEA0A1HW475M+X		4.7	50V	Electrolytic	AB
C3013	VCKYCY1HB272K*	X	2700p	50V	Ceramic	AA
C3014	VCKYCY1CB473K*	X	0.047	16V	Ceramic	AA
C3015	VCEACA1HC335K+	X	3.3	50V	Electrolytic	AB
C3016	VCE9GA1HW475M+X		4.7	50V	Electrolytic	AB
C3017	VCEACA1CC106K+	X	10	16V	Electrolytic	AB
C3018	VCEA0A1HW105M+X		1	50V	Electrolytic	AB
C3021	VCEA0A1HW475M+X		4.7	50V	Electrolytic	AB
C3022	VCEA0A1HW475M+X		4.7	50V	Electrolytic	AB
C3025	VCKYCY1CB473K*	X	0.047	16V	Ceramic	AA
C3027	VCKYCY1CB473K*	X	0.047	16V	Ceramic	AA
C3028	VCKYCY1HB682K*	X	6800p	50V	Ceramic	AA
C3029	VCKYCY1HB682K*	X	6800p	50V	Ceramic	AA

RESISTORS

RJ1	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
RJ5	VRS-CY1JF000J*	X	0 (32F631)	1/16W	Metal Oxide	AA
RJ8	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
RJ9	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
RJ10	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
RJ11	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
RJ12	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
RJ13	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
RJ14	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
RJ15	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
RJ16	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
RJ19	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
RJ20	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
RJ21	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
RJ22	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
RJ23	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
RJ25	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
R54	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R55	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R56	VRD-RA2BE823J*	X	82k	1/8W	Carbon	AA
R57	VRS-CY1JF473J*	X	47k	1/16W	Metal Oxide	AA
R201	VRS-CY1JF151J*	X	150	1/16W	Metal Oxide	AA
R202	VRS-CY1JF122J*	X	1.2k	1/16W	Metal Oxide	AA
R203	VRS-CY1JF682J*	X	6.8k	1/16W	Metal Oxide	AA
R204	VRS-CY1JF270J*	X	27	1/16W	Metal Oxide	AA
R205	VRS-CY1JF331J*	X	330	1/16W	Metal Oxide	AA
R206	VRD-RA2BE101J*	X	100	1/8W	Carbon	AA
R211	VRS-CY1JF221J*	X	220	1/16W	Metal Oxide	AA
R212	VRS-CY1JF221J*	X	220	1/16W	Metal Oxide	AA
R225	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R226	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R227	VRS-CY1JF273J*	X	27k	1/16W	Metal Oxide	AA
R232	VRS-CY1JF471J*	X	470	1/16W	Metal Oxide	AA
R234	VRD-RA2BE271J*	X	270	1/8W	Carbon	AA
R236	VRS-CY1JF332J*	X	3.3k	1/16W	Metal Oxide	AA
R301	VRS-CY1JF222J*	X	2.2k	1/16W	Metal Oxide	AA
R305	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
R306	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R307	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R308	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
R361	VRD-RA2BE224J*	X	220k	1/8W	Carbon	AA
R362	VRS-CY1JF182J*	X	1.8k	1/16W	Metal Oxide	AA
R363	VRS-CY1JF182J*	X	1.8k	1/16W	Metal Oxide	AA
R364	VRD-RA2BE152J*	X	1.5k	1/8W	Carbon	AA
R365	VRS-CY1JF152J*	X	1.5k	1/16W	Metal Oxide	AA
⚠ R367	VRN-RL3DB1R2J+	X	1.2	2W	Metal Film	AB
R368	VRD-RA2BE222J*	X	2.2k	1/8W	Carbon	AA
R369	VRD-RA2BE822J*	X	8.2k	1/8W	Carbon	AA
R371	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R372	VRS-CY1JF223J*	X	22k	1/16W	Metal Oxide	AA
R403	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
R404	VRS-CY1JF683J*	X	68k	1/16W	Metal Oxide	AA
R406	VRS-CY1JF473J*	X	47k	1/16W	Metal Oxide	AA
R407	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R408	VRS-CY1JF683J*	X	68k	1/16W	Metal Oxide	AA
R410	VRS-CY1JF473J*	X	47k	1/16W	Metal Oxide	AA
R411	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R412	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R413	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R414	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
R415	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
R422	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
R430	VRS-CY1JF391J*	X	390	1/16W	Metal Oxide	AA
R431	VRS-CY1JF331J*	X	330	1/16W	Metal Oxide	AA
R432	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R436	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
R437	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R438	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R439	VRS-CY1JF104J*	X	100k	1/16W	Metal Oxide	AA
R441	VRS-CY1JF472J*	X	4.7k	1/16W	Metal Oxide	AA
R442	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R444	VRS-CY1JF332J*	X	3.3k	1/16W	Metal Oxide	AA
R445	VRS-CY1JF332J*	X	3.3k	1/16W	Metal Oxide	AA
R446	VRS-CY1JF332J*	X	3.3k	1/16W	Metal Oxide	AA
R447	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R448	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R449	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R450	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
⚠ R451	VRS-RG3AB103J+	X	10k	1W	Metal Oxide	AB
R452	VRD-RM2HD823J*	X	82k	1/2W	Carbon	AA
R453	VRD-RM2HD223J*	X	22k	1/2W	Carbon	AA
R454	VRS-CY1JF471J*	X	470	1/16W	Metal Oxide	AA
R456	VRS-CY1JF103J*	X	10k	1/16W	Metal Oxide	AA
R460	VRS-CY1JF471J*	X	470	1/16W	Metal Oxide	AA
R461	VRS-CY1JF562J*	X	5.6k	1/16W	Metal Oxide	AA
R462	VRS-CY1JF223J*	X	22k	1/16W	Metal Oxide	AA
R463	VRD-RA2EE680J*	X	68	1/4W	Carbon	AA
R464	VRS-CY1JF683J*	X	68k	1/16W	Metal Oxide	AA
R467	VRS-CY1JF123J*	X	12k	1/16W	Metal Oxide	AA
R471	VRS-CY1JF333J*	X	33k	1/16W	Metal Oxide	AA
R472	VRS-CY1JF273J*	X	27k	1/16W	Metal Oxide	AA
R473	VRS-CY1JF471J*	X	470	1/16W	Metal Oxide	AA
R474	VRS-CY1JF681J*	X	680	1/16W	Metal Oxide	AA
R475	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R476	VRS-CY1JF393J*	X	39k	1/16W	Metal Oxide	AA
R477	VRS-CY1JF182J*	X	1.8k	1/16W	Metal Oxide	AA
R478	VRS-CY1JF151J*	X	150	1/16W	Metal Oxide	AA
R479	VRS-CY1JF473J*	X	47k	1/16W	Metal Oxide	AA
R480	VRS-CY1JF223J*	X	22k	1/16W	Metal Oxide	AA
R481	VRS-CY1JF152J*	X	1.5k	1/16W	Metal Oxide	AA
R482	VRS-CY1JF100J*	X	10	1/16W	Metal Oxide	AA
R483	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
⚠ R501	VRN-RL3ABR47J+	X	0.47	1W	Metal Film	AB
R502	VRN-RA2BK822F*	X	8.2k	1/8W	Metal Film	AB
R503	VRS-CY1JF105J*	X	1M	1/16W	Metal Oxide	AA
R504	VRS-CY1JF154J*	X	150k	1/16W	Metal Oxide	AA
R505	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R510	VRN-RA2BK103F*	X	10k	1/8W	Metal Film	AB
R511	VRN-RA2BK222F*	X	2.2k	1/8W	Metal Film	AB
R512	VRN-RA2BK272F*	X	2.7k	1/8W	Metal Film	AB
R513	VRD-RM2HD1R5J*	X	1.5	1/2W	Carbon	AA
R517	VRS-CY1JF104J*	X	100k	1/16W	Metal Oxide	AA
R518	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R521	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
⚠ R523	VRN-RL3DBR82J+	X	0.82	2W	Metal Film	AB
⚠ R524	VRS-RG3AB561J+	X	560	1W	Metal Oxide	AB
R601	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R603	VRD-RA2BE472J*	X	4.7k	1/8W	Carbon	AA
⚠ R604	VRS-KA3NG122J	X	1.2k	7W	Metal Oxide	AB
R605	VRD-RM2HD331J*	X	330	1/2W	Carbon	AA
R606	VRD-RM2HD331J*	X	330	1/2W	Carbon	AA
⚠ R609	VRS-RG3DB332J+	X	3.3k	2W	Metal Oxide	AB
R610	VRD-RM2HD220J*	X	22	1/2W	Carbon	AA
⚠ R611	VRW-KQ41C3R3K	X	3.3	15W	Cement	AC
R612	VRS-CY1JF154J*	X	150k	1/16W	Metal Oxide	AA
R613	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R614	VRS-CY1JF562J*	X	5.6k	1/16W	Metal Oxide	AA
R618	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA

PWB-A: DUNTKB567WEZ4(32UF5)

MAIN UNIT (Continued)

Ref. No.	Part No.	★			Description	Code
⚠ R621	VRN-RL3AB3R3J+	X	3.3	1W	Metal Film	AB
⚠ R622	VRN-RL3ABR33J+	X	0.33	1W	Metal Film	AB
⚠ R623	VRN-RL3AB4R7J+	X	4.7	1W	Metal Film	AB
⚠ R624	VRS-RG3DB332J+	X	3.3k	2W	Metal Oxide	AB
⚠ R627	VRN-RL3ABR47J+	X	0.47	1W	Metal Film	AB
⚠ R628	VRN-RL3ABR47J+	X	0.47	1W	Metal Film	AB
▲⚠ R651	VRS-RG2HC270J+	X	27	1/2W	Metal Oxide	AB
▲⚠ R652	VRD-RA2EE103G*	X	10k	1/4W	Carbon	AA
▲⚠ R653	VRD-RA2EE562G*	X	5.6k	1/4W	Carbon	AA
▲⚠ R654	VRD-RA2BE683J*	X	68k	1/8W	Carbon	AA
⚠ R658	VRS-RG3LB333J+	X	33k	3W	Metal Oxide	AB
R663	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R670	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
R684	VRD-RA2BE472J*	X	4.7k	1/8W	Carbon	AA
R685	VRD-RA2BE822J*	X	8.2k	1/8W	Carbon	AA
R686	VRD-RA2EE332J*	X	3.3k	1/4W	Carbon	AA
R687	VRD-RA2BE103J*	X	10k	1/8W	Carbon	AA
⚠ R688	VRN-RL3DB3R3J+	X	3.3	2W	Metal Film	AB
R689	VRD-RM2HD824J*	X	820k	1/2W	Carbon	AA
R695	VRS-CY1JF683J*	X	68k	1/16W	Metal Oxide	AA
⚠ R701	RR-DZ0049CEZZ*	X	3.9M	1/2W	Solid	AB
⚠ R703	VRW-KQ4AC1R2K	X	1.2	10W	Cement	AB
⚠ R705	VRN-RL3DBR15J+	X	0.15	2W	Metal Film	AB
⚠ R706	VRN-RL3DBR15J+	X	0.15	2W	Metal Film	AB
R707	VRD-RM2HD270J*	X	27	1/2W	Carbon	AA
R708	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R709	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
⚠ R710	VRS-RG2HC103J+	X	10k	1/2W	Metal Oxide	AB
R711	VRS-CY1JF334J*	X	330k	1/16W	Metal Oxide	AA
R712	VRD-RM2HD100J*	X	10	1/2W	Carbon	AA
⚠ R713	VRS-RG2HC122J+	X	1.2k	1/2W	Metal Oxide	AB
R715	VRD-RM2HD5R6J*	X	5.6	1/2W	Carbon	AA
R716	VRD-RM2HD100J*	X	10	1/2W	Carbon	AA
R720	VRD-RA2BE473J*	X	47k	1/8W	Carbon	AA
R724	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
R725	VRD-RM2HD821J*	X	820	1/2W	Carbon	AA
R734	VRD-RM2HD124J*	X	120k	1/2W	Carbon	AA
⚠ R737	VRN-RL3LBR82J+	X	0.82	3W	Metal Film	AB
R742	VRD-RA2BE222J*	X	2.2k	1/8W	Carbon	AA
R743	VRD-RM2HD470J*	X	47	1/2W	Carbon	AA
R751	VRD-RA2BE473J*	X	47k	1/8W	Carbon	AA
R752	VRD-RA2BE392J*	X	3.9k	1/8W	Carbon	AA
R753	VRS-CY1JF222J*	X	2.2k	1/16W	Metal Oxide	AA
R754	VRS-CY1JF222J*	X	2.2k	1/16W	Metal Oxide	AA
R755	VRS-CY1JF473J*	X	47k	1/16W	Metal Oxide	AA
R756	VRD-RA2BE152J*	X	1.5k	1/8W	Carbon	AA
⚠ R757	VRN-RL3DB4R7J+	X	4.7	2W	Metal Film	AB
R759	VRS-CY1JF103J*	X	10k	1/16W	Metal Oxide	AA
R761	VRS-CY1JF332J*	X	3.3k	1/16W	Metal Oxide	AA
R762	VRD-RA2BE103J*	X	10k	1/8W	Carbon	AA
R764	VRD-RM2HD562J*	X	5.6k	1/2W	Carbon	AA
R767	VRD-RM2HD151J*	X	150	1/2W	Carbon	AA
R768	VRD-RA2BE473J*	X	47k	1/8W	Carbon	AA
R770	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R771	VRS-CY1JF103J*	X	10k	1/16W	Metal Oxide	AA
R772	VRS-CY1JF103J*	X	10k	1/16W	Metal Oxide	AA
R773	VRD-RM2HD823J*	X	82k	1/2W	Carbon	AA
R774	VRD-RA2BE272J*	X	2.7k	1/8W	Carbon	AA
R775	VRS-CY1JF332J*	X	3.3k	1/16W	Metal Oxide	AA
R776	VRS-CY1JF332J*	X	3.3k	1/16W	Metal Oxide	AA
R801	VRS-CY1JF333J*	X	33k	1/16W	Metal Oxide	AA
R802	VRS-CY1JF471J*	X	470	1/16W	Metal Oxide	AA
R803	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
R805	VRS-CY1JF682J*	X	6.8k	1/16W	Metal Oxide	AA
R806	VRS-CY1JF681J*	X	680	1/16W	Metal Oxide	AA
R807	VRS-CY1JF681J*	X	680	1/16W	Metal Oxide	AA
R808	VRS-CY1JF681J*	X	680	1/16W	Metal Oxide	AA
R810	VRS-CY1JF472J*	X	4.7k	1/16W	Metal Oxide	AA
R903	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R904	VRS-CY1JF683J*	X	68k	1/16W	Metal Oxide	AA
R905	VRS-CY1JF223J*	X	22k	1/16W	Metal Oxide	AA
R906	VRD-RA2BE332J*	X	3.3k	1/8W	Carbon	AA
R907	VRS-CY1JF152J*	X	1.5k	1/16W	Metal Oxide	AA
R908	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R910	VRD-RA2BE102J*	X	1k	1/8W	Carbon	AA
R911	VRS-CY1JF683J*	X	68k	1/16W	Metal Oxide	AA
R912	VRS-CY1JF223J*	X	22k	1/16W	Metal Oxide	AA
R913	VRS-CY1JF332J*	X	3.3k	1/16W	Metal Oxide	AA
R914	VRS-CY1JF152J*	X	1.5k	1/16W	Metal Oxide	AA
R915	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R916	VRS-CY1JF683J*	X	68k	1/16W	Metal Oxide	AA
R917	VRS-CY1JF332J*	X	3.3k	1/16W	Metal Oxide	AA
R918	VRS-CY1JF332J*	X	3.3k	1/16W	Metal Oxide	AA
R922	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R923	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R924	VRS-CY1JF750J*	X	75	1/16W	Metal Oxide	AA
R925	VRS-CY1JF750J*	X	75	1/16W	Metal Oxide	AA
R926	VRS-CY1JF680J*	X	68	1/16W	Metal Oxide	AA
R927	VRS-CY1JF750J*	X	75	1/16W	Metal Oxide	AA
R929	VRS-CY1JF473J*	X	47k	1/16W	Metal Oxide	AA
R930	VRS-CY1JF473J*	X	47k	1/16W	Metal Oxide	AA
R931	VRS-CY1JF750J*	X	75	1/16W	Metal Oxide	AA
R932	VRS-CY1JF473J*	X	47k	1/16W	Metal Oxide	AA
R933	VRS-CY1JF473J*	X	47k	1/16W	Metal Oxide	AA
R934	VRS-CY1JF103J*	X	10k	1/16W	Metal Oxide	AA
R935	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R936	VRS-CY1JF223J*	X	22k	1/16W	Metal Oxide	AA
R937	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R938	VRS-CY1JF223J*	X	22k	1/16W	Metal Oxide	AA
R939	VRS-CY1JF333J*	X	33k	1/16W	Metal Oxide	AA
R940	VRS-CY1JF8R2J*	X	8.2	1/16W	Metal Oxide	AA
R941	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R942	VRS-CY1JF223J*	X	22k	1/16W	Metal Oxide	AA
R943	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R944	VRS-CY1JF223J*	X	22k	1/16W	Metal Oxide	AA
R945	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R946	VRS-CY1JF103J*	X	10k	1/16W	Metal Oxide	AA
R947	VRS-CY1JF223J*	X	22k	1/16W	Metal Oxide	AA
R948	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R949	VRS-CY1JF223J*	X	22k	1/16W	Metal Oxide	AA
R950	VRS-CY1JF750J*	X	75	1/16W	Metal Oxide	AA
R951	VRD-RA2BE680J*	X	68	1/8W	Carbon	AA
R952	VRS-CY1JF333J*	X	33k	1/16W	Metal Oxide	AA
R954	VRS-CY1JF221J*	X	220	1/16W	Metal Oxide	AA
R955	VRS-CY1JF221J*	X	220	1/16W	Metal Oxide	AA
R957	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R958	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R959	VRS-CY1JF103J*	X	10k	1/16W	Metal Oxide	AA
R960	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R961	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R962	VRS-CY1JF332F*	X	3.3k	1/16W	Metal Oxide	AA
R963	VRD-RA2BE101J*	X	100	1/8W	Carbon	AA
R964	VRS-CY1JF152J*	X	1.5k	1/16W	Metal Oxide	AA
R967	VRS-CY1JF682J*	X	6.8k	1/16W	Metal Oxide	AA
R968	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R969	VRS-CY1JF472F*	X	4.7k	1/16W	Metal Oxide	AA
R970	VRD-RA2BE6R8J*	X	6.8	1/8W	Carbon	AA
R971	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R972	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R973	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
R974	VRS-CY1JF103J*	X	10k	1/16W	Metal Oxide	AA
R975	VRS-CY1JF333J*	X	33k	1/16W	Metal Oxide	AA
R982	VRS-CY1JF750J*	X	75 (32F630)	1/16W	Metal Oxide	AA
R983	VRS-CY1JF473J*	X	47k	1/16W	Metal Oxide	AA
R984	VRS-CY1JF473J*	X	47k	1/16W	Metal Oxide	AA
⚠ R1420	VRN-RL3LB2R7J+	X	2.7	3W	Metal Film	AB
R2001	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R2004	VRS-CY1JF101J*	X	100	1/16W	Metal Oxide	AA
R2008	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R2010	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R2013	VRS-CY1JF682J*	X	6.8k	1/16W	Metal Oxide	AA
R2021	VRS-CY1JF334J*	X	330k	1/16W	Metal Oxide	AA
R2024	VRS-CY1JF472J*	X	4.7k	1/16W	Metal Oxide	AA
R2025	VRS-CY1JF472J*	X	4.7k	1/16W	Metal Oxide	AA
R2026	VRS-CY1JF472J*	X	4.7k	1/16W	Metal Oxide	AA

PWB-A: DUNTKB567WEZ4(32UF5)

MAIN UNIT (Continued)

Ref. No.	Part No.	★	Description	Code
R2027	VRS-CY1JF102J*	X	1k 1/16W Metal Oxide	AA
R2028	VRD-RA2BE102J*	X	1k 1/8W Carbon	AA
R2031	VRS-CY1JF222J*	X	2.2k 1/16W Metal Oxide	AA
R2033	VRS-CY1JF334J*	X	330k 1/16W Metal Oxide	AA
R2040	VRS-CY1JF102J*	X	1k 1/16W Metal Oxide	AA
R2041	VRS-CY1JF333J*	X	33k 1/16W Metal Oxide	AA
R2042	VRS-CY1JF101J*	X	100 1/16W Metal Oxide	AA
R2043	VRS-CY1JF333J*	X	33k 1/16W Metal Oxide	AA
R2044	VRS-CY1JF153J*	X	15k 1/16W Metal Oxide	AA
R2046	VRS-CY1JF101J*	X	100 1/16W Metal Oxide	AA
R2047	VRS-CY1JF221J*	X	220 1/16W Metal Oxide	AA
R2048	VRS-CY1JF562J*	X	5.6k 1/16W Metal Oxide	AA
R2051	VRS-CY1JF102J*	X	1k 1/16W Metal Oxide	AA
R2060	VRS-CY1JF221J*	X	220 1/16W Metal Oxide	AA
R2061	VRS-CY1JF562J*	X	5.6k 1/16W Metal Oxide	AA
R2062	VRS-CY1JF223J*	X	22k 1/16W Metal Oxide	AA
R2063	VRS-CY1JF222J*	X	2.2k 1/16W Metal Oxide	AA
R2064	VRS-CY1JF332J*	X	3.3k 1/16W Metal Oxide	AA
R2073	VRS-CY1JF000J*	X	0 1/16W Metal Oxide	AA
R2084	VRS-CY1JF103J*	X	10k 1/16W Metal Oxide	AA
R2086	VRS-CY1JF101J*	X	100 1/16W Metal Oxide	AA
R2090	VRS-CY1JF101J*	X	100 1/16W Metal Oxide	AA
R2092	VRS-CY1JF101J*	X	100 1/16W Metal Oxide	AA
R2101	VRS-CY1JF101J*	X	100 1/16W Metal Oxide	AA
R2102	VRS-CY1JF101J*	X	100 1/16W Metal Oxide	AA
R2201	VRS-CY1JF222J*	X	2.2k 1/16W Metal Oxide	AA
R2202	VRS-CY1JF103J*	X	10k 1/16W Metal Oxide	AA
R2203	VRS-CY1JF473J*	X	47k 1/16W Metal Oxide	AA
R2211	VRS-CY1JF222J*	X	2.2k 1/16W Metal Oxide	AA
R2212	VRS-CY1JF682J*	X	6.8k 1/16W Metal Oxide	AA
R2213	VRS-CY1JF333J*	X	33k 1/16W Metal Oxide	AA
R2401	VRD-RA2BE101J*	X	100 1/8W Carbon	AA
R2402	VRD-RA2BE101J*	X	100 1/8W Carbon	AA
R2403	VRD-RA2BE101J*	X	100 1/8W Carbon	AA
R2404	VRD-RA2BE101J*	X	100 1/8W Carbon	AA
R2501	VRS-CY1JF183J*	X	18k 1/16W Metal Oxide	AA
R2502	VRS-CY1JF183J*	X	18k 1/16W Metal Oxide	AA
R2503	VRS-CY1JF103J*	X	10k 1/16W Metal Oxide	AA
R2504	VRS-CY1JF103J*	X	10k 1/16W Metal Oxide	AA
R2509	VRS-CY1JF000J*	X	0 1/16W Metal Oxide	AA
R3001	VRS-CY1JF221J*	X	220 1/16W Metal Oxide	AA
R3002	VRS-CY1JF221J*	X	220 1/16W Metal Oxide	AA
R3003	VRS-CY1JF105J*	X	1M 1/16W Metal Oxide	AA
R3004	VRS-CY1JF104J*	X	100k 1/16W Metal Oxide	AA
R3005	VRS-CY1JF623J*	X	62k 1/16W Metal Oxide	AA
R3007	VRS-CY1JF332J*	X	3.3k 1/16W Metal Oxide	AA
R3008	VRS-CY1JF302J*	X	3k 1/16W Metal Oxide	AA
R3010	VRS-CY1JF392J*	X	3.9k 1/16W Metal Oxide	AA
R3017	VRS-CY1JF102J*	X	1k 1/16W Metal Oxide	AA
R3018	VRS-CY1JF102J*	X	1k 1/16W Metal Oxide	AA
R3019	VRS-CY1JF101J*	X	100 1/16W Metal Oxide	AA
R3024	VRD-RA2BE102J*	X	100 1/16W Metal Oxide	AA
R3024	VRD-RA2BE102J*	X	1k 1/8W Carbon	AA

BALUNES

FB601	RBLN-0047CEZZ*	X	Balun	AB
FB706	RBLN-0037CEZZ*	X	Balun	AB
FB2001	RBLN-0037CEZZ*	X	Balun	AB

MISCELLANEOUS PARTS

	QPWBFB567WJN2	X	Printed Wiring Board	AT
⚠ ACC701	QACCDA012WJPZ	X	AC Cord	AE
FH701	QFSHD1013CEZZ+	X	Fuse Holder	AB
FH702	QFSHD1014CEZZ+	X	Fuse Holder	AB
⚠ F701	QFS-B4023CEZZ	X	Fuse, 4A/125V	AB
J904	QJAKGA031WJZZ	X	Front In Jack(32F630)	AC
J921	QSOCD0430CEZZ	X	S-Video Terminal	AC
J1401	QTANJ1101SEZZ	X	In Out Jack	AF
P361	QPLGN0461CEZZA	X	Plug, 4Pin(S1-4)	AB
P401	QPLGN0861CEZZA	X	Plug, 8Pin(CJ)	AB
P601	QPLGN0161FJZZ	X	Plug, 6Pin(K1-6)	AB
P602	QPLGN0761CEZZA	X	Plug, 7Pin(XA)	AB
P603	QPLGN0161FJZZ	X	Plug, 6Pin(XB)	AB
P604	QPLGN0157FJZZ	X	Plug, 2Pin(XC)	AB
P621	QPLGN0761CEZZA	X	Plug, 7Pin(N)	AB
P651	QPLGN0361CEZZA	X	Plug, 3Pin(TP651-3)	AB
P702	QPLGN0269GEZZ	X	Plug, 2Pin(P1-2)	AB
P703	QPLGN0260CEZZ	X	Plug, 2Pin(M1-2)	AB
P1301	QPLGN0661CEZZA	X	Plug, 6Pin(EJ)(32UF5)	AB
P2003	QPLGN0561CEZZA	X	Plug, 5Pin(KA)(32UF5)	AB
P2401	QPLGN0661CEZZA	X	Plug, 6Pin	AB
RDA361	PRDAR0258PEFW	X	Heat Sink for IC361	AC
RDA501	PRDARA039WJFW	X	Heat Sink for IC501	AD
RDA601	PRDARA041WJFW	X	Heat Sink for Q602	AD
RDA671	PRDARA057WJFW	X	Heat Sink for Q673	AC
RDA701	PRDAR0279PEFW	X	Heat Sink for Q701	AC
RDA750	PRDAR5072CEFW	X	Heat Sink for IC751	AB
RDA1403	PRDAR5072CEFW	X	Heat Sink for IC1403	AB
RMC2601	RRMCU0222CEZZ	X	Remote Receiver (32UF5)	AD
RY701	RRLYJ0081CEZZ	X	Relay	AD
SG601	QSPGH0025CEZZ	X	Spark Gap	AB
CF2040	RCRM-0003CEZZ+	X	Ceramic Vibrator	AC
TP701	QLUGP0102PEZZ	X	Lug	AA

PWB-B: DUNTKA527WEV9

CRT UNIT

INTEGRATED CIRCUIT

⚠ IC850	VHiTDA6103Q-1	X	TDA6103Q/N3	AG

TRANSISTORS

Q850	VS2SA1266-Y-1+	X	2SA1266-Y	AB
Q851	VS2SC3198-G-1+	X	2SC3198-G	AB
Q1504	VS2SC3198-G-1+	X	2SC3198-G	AB
Q1505	VS2SA1266-Y-1+	X	2SA1266-Y	AB
Q1506	VS2SA1964E/-1	X	2SA1964E	AC
Q1507	VS2SC5248E/-1	X	2SC5248E	AC

Ref. No.	Part No.	★	Description	Code

PWB-B: DUNTKA527WEV9
CRT UNIT (Continued)

DIODES

D853	RH-EX0647GEZZ∗	X	Zener Diode, 15V	AB
D854	VHD1SS119//-1∗	X	1SS119	AB
D855	VHD1SS119//-1∗	X	1SS119	AB
D1502	VHD1SS119//-1∗	X	1SS119	AB
D1503	VHD1SS119//-1∗	X	1SS119	AB
D1506	RH-DX0487CEZZ∗	X	Diode	AB
D1507	RH-DX0487CEZZ∗	X	Diode	AB
D1510	VHD1SS119//-1∗	X	1SS119	AB

CAPACITORS

C850	VCFYSB2EB823J	X	0.082	250V		AB
C851	RC-KZ018JCEZZ	X	0.01	AC250V	Ceramic	AB
C852	VCEA0A1CW107M+X		100	16V	Electrolytic	AB
C853	VCFYFA1HA224J+	X	0.22	50V	Mylar	AB
C854	VCEA0A1CW227M+X		220	16V	Electrolytic	AB
C855	VCEA0A2EW336M+X		33	250V	Electrolytic	AB
C856	VCEA0A1HW106M+X		10	50V	Electrolytic	AB
C1501	VCEA0A1CW476M+X		47	16V	Electrolytic	AB
C1506	VCKYPA1HF103Z+	X	0.01	50V	Ceramic	AA
C1508	VCKYPA2HB472K+	X	4700p	500V	Ceramic	AB
C1509	VCKYPA1HB472K+	X	4700p	50V	Ceramic	AB
C1510	VCKYPA1HF103Z+	X	0.01	50V	Ceramic	AA
C1511	VCKYPA1HF103Z+	X	0.01	50V	Ceramic	AA
C1515	VCEA0A1HW476M+X		47	50V	Electrolytic	AB
C1516	VCEA0A1HW476M+X		47	50V	Electrolytic	AB
C1517	VCEA0A2AW106M+X		10	100V	Electrolytic	AB
C1518	VCCSPA2HL560K+	X	56p	500V	Ceramic	AB
C1519	VCEA0A2CW106M+X		10	160V	Electrolytic	AB

RESISTORS

⚠	R850	VRS-SV2HC152J	X	1.5k	1/2W	Metal Oxide	AB
⚠	R851	VRS-SV2HC152J	X	1.5k	1/2W	Metal Oxide	AB
⚠	R852	VRS-SV2HC152J	X	1.5k	1/2W	Metal Oxide	AB
⚠	R853	VRS-SV2HC272J	X	2.7k	1/2W	Metal Oxide	AB
⚠	R854	VRS-SV2HC272J	X	2.7k	1/2W	Metal Oxide	AB
⚠	R855	VRS-SV2HC272J	X	2.7k	1/2W	Metal Oxide	AB
	R856	VRD-RM2HD104J∗	X	100k	1/2W	Carbon	AA
	R857	VRD-RM2HD104J∗	X	100k	1/2W	Carbon	AA
	R858	VRD-RM2HD104J∗	X	100k	1/2W	Carbon	AA
	R862	VRC-MA2HG152K∗	X	1.5k	1/2W	Solid	AB
	R863	VRC-MA2HG152K∗	X	1.5k	1/2W	Solid	AB
	R864	VRC-MA2HG152K∗	X	1.5k	1/2W	Solid	AB
⚠	R867	VRS-SV2HC392J	X	3.9k	1/2W	Metal Oxide	AB
⚠	R868	VRS-SV2HC682J	X	6.8k	1/2W	Metal Oxide	AB
	R869	VRD-RA2BE103J∗	X	10k	1/8W	Carbon	AA
	R870	VRD-RA2BE223J∗	X	22k	1/8W	Carbon	AA
	R871	VRD-RA2BE472J∗	X	4.7k	1/8W	Carbon	AA
	R872	VRD-RA2EE680J∗	X	68	1/4W	Carbon	AA
	R873	VRD-RM2HD224J∗	X	220k	1/2W	Carbon	AA
	R874	VRD-RM2HD104J∗	X	100k	1/2W	Carbon	AA
	R875	VRD-RM2HD104J∗	X	100k	1/2W	Carbon	AA
	R876	VRD-RM2HD104J∗	X	100k	1/2W	Carbon	AA
	R877	VRD-RA2BE103J∗	X	10k	1/8W	Carbon	AA
⚠	R878	VRS-SV2HC120J	X	12	1/2W	Metal Oxide	AB
	R1511	VRD-RA2BE101J∗	X	100	1/8W	Carbon	AA
⚠	R1513	VRS-VV3DB561J	X	560	2W	Metal Oxide	AB
	R1514	VRD-RA2BE100J∗	X	10	1/8W	Carbon	AA
	R1515	VRD-RA2BE820J∗	X	82	1/8W	Carbon	AA
	R1516	VRD-RA2BE820J∗	X	82	1/8W	Carbon	AA
	R1517	VRD-RA2BE122J∗	X	1.2k	1/8W	Carbon	AA
	R1518	VRD-RA2BE683J∗	X	68k	1/8W	Carbon	AA
	R1519	VRD-RA2BE123J∗	X	12k	1/8W	Carbon	AA
	R1520	VRD-RA2BE683J∗	X	68k	1/8W	Carbon	AA
	R1521	VRD-RA2BE122J∗	X	1.2k	1/8W	Carbon	AA
	R1525	VRD-RA2EE560J∗	X	56	1/4W	Carbon	AA
	R1526	VRD-RA2EE560J∗	X	56	1/4W	Carbon	AA
	R1527	VRD-RM2HD1R5J∗	X	1.5	1/2W	Carbon	AA
	R1528	VRD-RM2HD1R5J∗	X	1.5	1/2W	Carbon	AA
⚠	R1529	VRS-VV3DB221J	X	220	2W	Metal Oxide	AB
	R1530	VRD-RA2BE122J∗	X	1.2k	1/8W	Carbon	AA

PWB-C: DUNTKB573WEV0
3-LINE Y/C UNIT

INTEGRATED CIRCUIT

IC1401	VHiTC90A53F-1∗	X	TC90A53F	AP

TRANSISTORS

Q1401	VS2SD601AR/-1∗	X	2SD601AR	AB
Q1402	VS2SD601AR/-1∗	X	2SD601AR	AB
Q1403	VS2SB709AR/-1∗	X	2SB709AR	AB
Q1404	VS2SD601AR/-1∗	X	2SD601AR	AB
Q1406	VS2SB709AR/-1∗	X	2SB709AR	AB
Q1407	VS2SD601AR/-1∗	X	2SD601AR	AB
Q1408	VS2SB709AR/-1∗	X	2SB709AR	AB

COILS

L1401	VP-XF100K0000∗	X	Peaking, 10µH	AB
L1402	VP-XF100K0000∗	X	Peaking, 10µH	AB
L1406	VP-XF220K0000∗	X	Peaking, 22µH	AB
L1407	VP-XF220K0000∗	X	Peaking, 22µH	AB
L1408	VP-XF100K0000∗	X	Peaking, 10µH	AB
L1410	VP-XF100K0000∗	X	Peaking, 10µH	AB
L1414	VP-XF330K0000∗	X	Peaking, 33µH	AB
L1417	VP-XF220K0000∗	X	Peaking, 22µH	AB

CAPACITORS

C1412	VCEA0A1HW106M+X		10	50V	Electrolytic	AB
C1413	VCKYCY1HF103Z∗	X	0.01	50V	Ceramic	AA
C1414	VCCCCY1HH3R0C∗X		3p	50V	Ceramic	AB
C1415	VCE9GA1CW106M+X		10	16V	Electrolytic	AB
C1416	VCEA0A1CW477M+X		470	16V	Electrolytic	AB
C1417	VCKYCY1CF104Z∗	X	0.1	16V	Ceramic	AA
C1420	VCCCCY1HH270J∗	X	27p	50V	Ceramic	AA
C1421	VCCCCY1HH120J∗	X	12p	50V	Ceramic	AA
C1422	VCCCCY1HH120J∗	X	12p	50V	Ceramic	AA
C1423	VCCCCY1HH3R0C∗X		3p	50V	Ceramic	AB
C1424	VCCCCY1HH270J∗	X	27p	50V	Ceramic	AA
C1425	VCCCCY1HH100D∗X		10p	50V	Ceramic	AA
C1428	VCKYCY1HF103Z∗	X	0.01	50V	Ceramic	AA
C1435	VCKYCY1HF103Z∗	X	0.01	50V	Ceramic	AA
C1436	VCKYCY1CF104Z∗	X	0.1	16V	Ceramic	AA
C1439	VCE9GA1CW106M+X		10	16V	Electrolytic	AB
C1440	VCEA0A1HW106M+X		10	50V	Electrolytic	AB
C1441	VCKYCY1HF103Z∗	X	0.01	50V	Ceramic	AA
C1442	VCFYFA1HA474J+	X	0.47	50V	Mylar	AB
C1443	VCKYCY1HF103Z∗	X	0.01	50V	Ceramic	AA
C1444	VCKYCY1HB472K∗	X	4700p	50V	Ceramic	AA
C1445	VCKYCY1HF103Z∗	X	0.01	50V	Ceramic	AA
C1446	VCCCCY1HH181J∗	X	180p	50V	Ceramic	AB
C1447	VCKYCY1HF103Z∗	X	0.01	50V	Ceramic	AA
C1448	VCKYCY1CF104Z∗	X	0.1	16V	Ceramic	AA
C1449	VCKYCY1CF104Z∗	X	0.1	16V	Ceramic	AA
C1451	VCEA0A1CW107M+X		100	16V	Electrolytic	AB
C1452	VCKYCY1CF104Z∗	X	0.1	16V	Ceramic	AA
C1453	VCKYCY1HF103Z∗	X	0.01	50V	Ceramic	AA
C1454	VCKYCY1HF103Z∗	X	0.01	50V	Ceramic	AA
C1455	VCKYCY1HF103Z∗	X	0.01	50V	Ceramic	AA

Ref. No.	Part No.	★	Description			Code
C1456	VCKYCY1CF104Z*	X	0.1	16V	Ceramic	AA
C1457	VCEA0A1HW106M+	X	10	50V	Electrolytic	AB
C1458	VCEA0A1HW106M+	X	10	50V	Electrolytic	AB
C1460	VCKYCY1HF103Z*	X	0.01	50V	Ceramic	AA
C1470	VCCCCY1HH270J*	X	27p	50V	Ceramic	AA
C1474	VCCCCY1HH150J*	X	15p	50V	Ceramic	AA

PWB-C: DUNTKB573WEV0
3-LINE Y/C UNIT (Continued)

RESISTORS

RJ1	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
RJ2	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
RJ3	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
RJ5	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
RJ6	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
RJ7	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
R1402	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
R1405	VRS-CY1JF361J*	X	360	1/16W	Metal Oxide	AA
R1406	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R1407	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R1410	VRS-CY1JF473J*	X	47k	1/16W	Metal Oxide	AA
R1411	VRS-CY1JF223J*	X	22k	1/16W	Metal Oxide	AA
R1412	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R1413	VRS-CY1JF122J*	X	1.2k	1/16W	Metal Oxide	AA
R1414	VRS-CY1JF331J*	X	330	1/16W	Metal Oxide	AA
R1415	VRS-CY1JF391J*	X	390	1/16W	Metal Oxide	AA
R1416	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R1421	VRS-CY1JF471F*	X	470	1/16W	Metal Oxide	AA
R1423	VRS-CY1JF152F*	X	1.5k	1/16W	Metal Oxide	AA
R1426	VRS-CY1JF000J*	X	0	1/16W	Metal Oxide	AA
R1428	VRS-CY1JF332J*	X	3.3k	1/16W	Metal Oxide	AA
R1429	VRS-CY1JF222J*	X	2.2k	1/16W	Metal Oxide	AA
R1430	VRS-CY1JF473J*	X	47k	1/16W	Metal Oxide	AA
R1431	VRS-CY1JF223J*	X	22k	1/16W	Metal Oxide	AA
R1432	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R1433	VRS-CY1JF122J*	X	1.2k	1/16W	Metal Oxide	AA
R1434	VRS-CY1JF331J*	X	330	1/16W	Metal Oxide	AA
R1435	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R1436	VRS-CY1JF331J*	X	330	1/16W	Metal Oxide	AA
R1438	VRS-CY1JF222J*	X	2.2k	1/16W	Metal Oxide	AA
R1456	VRS-CY1JF564J*	X	560k	1/16W	Metal Oxide	AA
R1457	VRS-CY1JF103J*	X	10k	1/16W	Metal Oxide	AA
R1458	VRD-RA2BE103J*	X	10k	1/8W	Carbon	AA
R1459	VRS-CY1JF821J*	X	820	1/16W	Metal Oxide	AA
R1466	VRS-CY1JF103J*	X	10k	1/16W	Metal Oxide	AA
R1467	VRS-CY1JF682J*	X	6.8k	1/16W	Metal Oxide	AA
R1473	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA
R1475	VRS-CY1JF102J*	X	1k	1/16W	Metal Oxide	AA

BALUN

FB1401	RBLN-0061TAZZ*	X	Balun		AB

MISCELLANEOUS PART

P1401	QPLGZ0810CEZZ	X	Plug, 8Pin		AB

PWB-F: DUNTKB207WEA5
CONTROL UNIT(32UF5)

CAPACITOR

C4001	VCEA0A1HW476M+	X	47	50V	Electrolytic	AB

RESISTORS

R4001	VRD-RA2BE470J*	X	47	1/8W	Carbon	AA
R4006	VRD-RA2BE822J*	X	8.2k	1/8W	Carbon	AA
R4007	VRD-RA2BE822J*	X	8.2k	1/8W	Carbon	AA
R4009	VRD-RA2BE183J*	X	18k	1/8W	Carbon	AA
R4011	VRD-RA2BE183J*	X	18k	1/8W	Carbon	AA
R4020	VRD-RA2BE750J*	X	75	1/8W	Carbon	AA

Ref. No.	Part No.	★	Description			Code

SWITCHES

S4001	QSW-KA003WJZZ+	X	Switch, POWER			AB
S4002	QSW-KA003WJZZ+	X	Switch, MENU			AB
S4003	QSW-KA003WJZZ+	X	Switch, VOL.-DOWN			AB
S4004	QSW-KA003WJZZ+	X	Switch, VOL.-UP			AB
S4005	QSW-KA003WJZZ+	X	Switch, CH-DOWN			AB
S4006	QSW-KA003WJZZ+	X	Switch, CH-UP			AB

MISCELLANEOUS PARTS

J4001	QJAKGA031WJZZ	X	Input-2 Jack			AC
P4001	QPLGN0641CEZZ	X	Plug, 6Pin(EJ)			AB
P4004	QPLGN0541CEZZ	X	Plug, 5Pin(KA)			AB
RMC4001	RRMCU0222CEZZ	X	Remote Receiver			AD

PWB-H: DUNTKB569WEV0
DF MODULE UNIT

INTEGRATED CIRCUIT

IC1680	VHiKiA358P+-1	X	KIA358P		AB

TRANSISTORS

Q1680	VS2SC5022//1E	X	2SC5022		AE
Q1681	VS2SC3198-G-1+	X	2SC3198-G		AB

DIODES

D1610	RH-DX0202CEZZ*	X	Diode		AB
D1681	RH-DX0475CEZZ*	X	Diode		AA
D1682	RH-DX0475CEZZ*	X	Diode		AA
D1683	RH-DX0475CEZZ*	X	Diode		AA
D1684	RH-DX0475CEZZ*	X	Diode		AA
D1686	RH-DX0487CEZZ*	X	Diode		AB
D1687	RH-EX0618GEZZ*	X	Zener Diode, 6.2V		AB
D1688	VHD1SS119//-1*	X	1SS119		AB

COILS

L1640	RCiLZA022WJZZ	X	Coil		AE
L1641	RCiLZA023WJZZ	X	Coil		AE
L1680	RCiLZA034WJZZ	X	Coil		AC
L1681	VP-DF8R2K0000*	X	Peaking, 8.2µH		AA

TRANSFORMER

⚠ T1680	RTRNZ0209PEZZ	X	Transformer		AG

CAPACITORS

C1610	VCFYSB2EB224K	X	0.22	250V		AB
C1644	VCFPFA2EB684J	X	0.68	250V		AB
			MetalIzed Polypro Film			
C1677	VCKYPA1HB391K+	X	390p	50V	Ceramic	AA
C1678	VCKYPA1HB391K+	X	390p	50V	Ceramic	AA
C1681	RC-KZ0024CEZZ	X	1000p	2kV		AB
C1682	RC-KZ0037CEZZ	X	390p	2kV		
C1683	VCE9GA1HW335M+	X	3.3	50V	Electrolytic	AB
C1684	VCEA0A1VW477M+	X	470	35V	Electrolytic	AB
C1685	VCFYFA1HA474J+	X	0.47	50V	Mylar	AB
C1686	VCEA0A1VW108M+	X	1000	35V	Electrolytic	AB
C1687	VCEA0A1EW107M+	X	100	25V	Electrolytic	AA
C1695	VCFYFA1HA224J+	X	0.22	50V	Mylar	AB

RESISTORS

R1610	VRS-VV3DB103J	X	10k	2W	Metal Oxide	AA
R1627	VRS-KT3LB122J	X	1.2k	3W	Metal Oxide	
R1656	VRD-RA2BE394J*	X	390k	1/8W	Carbon	AA
R1657	VRD-RA2BE683J*	X	68k	1/8W	Carbon	AA
R1658	VRD-RA2BE183J*	X	18k	1/8W	Carbon	AA
R1659	VRD-RA2BE102J*	X	1k	1/8W	Carbon	AA
R1680	VRS-KT3LB154J	X	150k	3W	Metal Oxide	AB
R1681	VRS-KT3LB104J	X	100k	3W	Metal Oxide	
R1682	VRC-MA2HG333K*	X	33k	1/2W	Solid	AB
R1683	VRD-RA2BE332J*	X	3.3k	1/8W	Carbon	AA
R1684	VRD-RA2BE681J*	X	680	1/8W	Carbon	AA
R1685	VRS-VV3AB181J	X	180	1W	Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code

PWB-H: DUNTKB569WEV0
DF MODULE UNIT (Continued)

R1686	VRD-RA2BE103J*	X	10k	1/8W	Carbon	AA
R1687	VRD-RA2BE103J*	X	10k	1/8W	Carbon	AA
R1688	VRD-RA2BE473J*	X	47k	1/8W	Carbon	AA
R1689	VRD-RA2BE823J*	X	82k	1/8W	Carbon	AA
R1690	VRD-RA2BE822J*	X	8.2k	1/8W	Carbon	AA
R1691	VRD-RA2BE823J*	X	82k	1/8W	Carbon	AA
R1695	VRD-RA2BE224J*	X	220k	1/8W	Carbon	AA
R1697	VRD-RA2EE1R0J*	X	1	1/4W	Carbon	AA
R1698	VRD-RA2BE472J*	X	4.7k	1/8W	Carbon	AA
R1699	VRD-RA2BE562J*	X	5.6k	1/8W	Carbon	AA

MISCELLANEOUS PARTS

P1602	QPLGN0741CEZZ	X	Plug, 7Pin(XA)	AB
P1603	QPLGN0161FJZZ	X	Plug, 6Pin(XB)	AB
P1604	QPLGN0157FJZZ	X	Plug, 2Pin(XC)	AB
RDA1680	PRDAR0135PEFW	X	Heat Sink for Q1680	AB
SG1681	QSPGH0025CEZZ	X	Spark Gap	AB

MISCELLANEOUS PARTS

P3004	QPLGN0242CEZZ	X	Plug, 2Pin(TP3001-3002)	AA
P3006	QPLGZ0610CEZZ	X	Plug, 6Pin	AB
P3007	QPLGZ0610CEZZ	X	Plug, 6Pin	AB
SP1, SP2	VSP1206PB648A	X	Speaker(32UF5)	AG
	QCNW-A475WJZZ	X	Connecting Cord(32UF5)	AC
	QCNW-B175WJZZ	X	Connecting Cord	AC
	QCNW-B176WJZZ	X	Connecting Cord	AC
	QCNW-B177WJZZ	X	Connecting Cord	AC
	QCNW-B178WJZZ	X	Connecting Cord	AE
	QCNW-B179WJZZ	X	Connecting Cord	AC
	QCNW-B240WJZZ	X	Connecting Cord(32UF5)	AE
	QCNW-B241WJZZ	X	Connecting Cord(32UF5)	AB

SUPPLIED ACCESSORIES

RRMCGA035WJSA	X	Infrared R-C Unit		AT
TINS-A759WJZZ	X	Opearation Manual(32UF5)		AE
TGAN-0001GJZZ	X	Registration Card		AB

PACKING PARTS
(NOT REPLACEMENT ITEM)

SPAKCA590WJZZ	-	Packing Case(32UF5)	—
SPAKP0110GJZZ	-	Wrapping Paper	—
SPAKX0131GJZZ	-	Buffer Material(32UF5)	—
TLABZA218WJZZ	-	Carton Label (32UF5)	—
SSAKA0101GJZZ	-	Polyethylene Bag	—

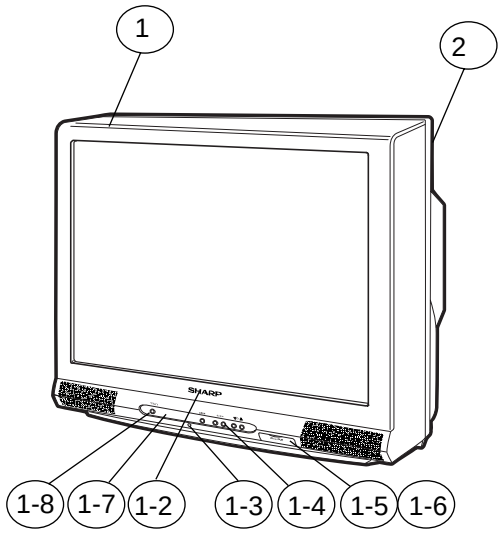
Ref. No.	Part No.	★	Description	Code

CABINET PARTS

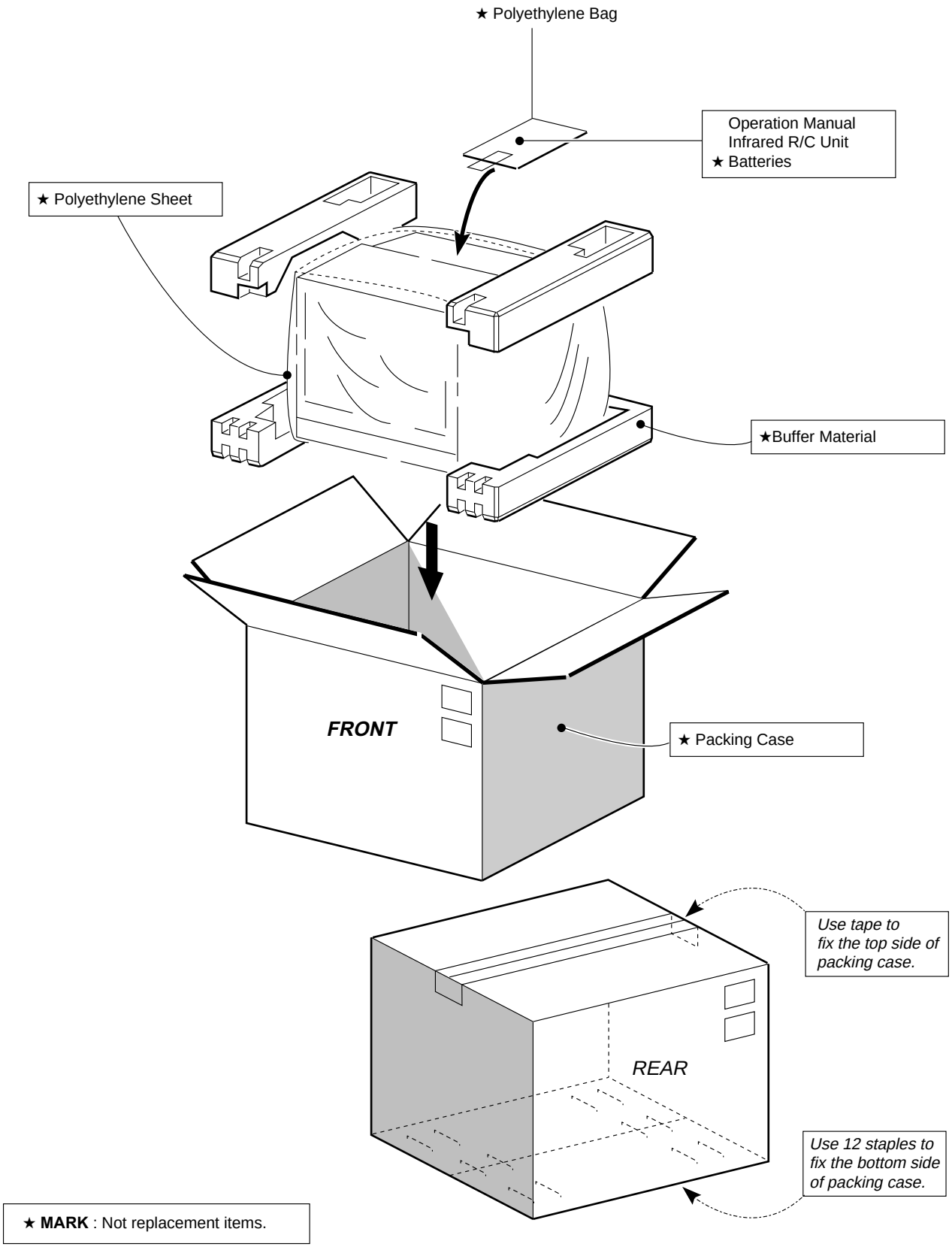
32UF5

1	CCABA0176WEH3	X	Front Cabinet Ass'y	BH
1-1	*Not Available*	-	Front Cabinet	—
1-2	HBDGB3141CESA	X	Badge	AD
1-3	HDECQ0105GJKA	X	Decration Plate	AF
1-4	JBTN-0128GJKA	X	Button	AC
1-5	GDORF0105GJKC	X	Door	AE
1-6	HiNDPA433WJSA	X	Indicator	AC
1-7	HDECQ0104GJKA	X	Decration Plate	AF
1-8	JBTN-0129GJKA	X	Button	AB
2	CCABB0160WEH0	X	Rear Cabinet	BB

CABINET PARTS LOCATION



PACKING OF THE SET



★ **MARK** : Not replacement items.

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